SEARCH REQUEST FORM

Scientific and Technical Information Center

Requester's Full Name: Art Unit: 75 2 Phone Mail Box and Bldg/Room Locati If more than one search is sub	on: PEM 9)61 Re	esults Format Preferred (circl	e): PAPER DISK E-MAIL
Please provide a detailed statement of the Include the elected species or structures utility of the invention. Define any term known. Please attach a copy of the covered to the covered t	the search topic; and describ, keywords, synonyms, acr	be as specifically as possible the stronyms, and registry numbers, and	*******
Title of Invention:			
Inventors (please provide full names):			Pat. & T.M. Office
_	Dease see	parent Pub 20	03 /017 5 627 (627
Earliest Priority Filing Date:	/		/ (62)
For Sequence Searches Only Please incl appropriate serial number.	t ude all pertinent information	n (parent, child, divisional, or issued	patent numbers) along with the
Please Search	V	<u>.</u>	reral formula (C)
please also see	some of its	compounds	
U CO LANGE OF	1 10 1 2 6 2	.8 with compou	mds 64-85
(1) From p	Je, 03 - 2		100
Q)	34	And the second s	.105
(3)	. 35		.108
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Thank you.		•	
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有有我的的的的,我们就是我们的的,我们就是我们的的,我们就会没有的的的。	**********	*******	*
STAFF USE ONLY	Type of Search	Vendors and cost w	**
Searcher: EJ	NA Sequence (#)	STN	
Searcher Phone #:	AA Sequence (#)	Dialog	
Searcher Location:	Structure (#)	Questel/Orbit	
Date Searcher Picked Up:	Bibliographic	Dr.Link	
Date Completed: 4-13-05	Litigation	Lexis/Nexis	
Searcher Prep & Review Time:	Fulltext	Sequence Systems	
Clerical Prep Time:	Patent Family	WWW/Internet	
Online Time:	Other	Other (specify)	

PTO-1590 (8-01)

=> file reg FILE 'REGISTRY' ENTERED AT 18:42:38 ON 13 APR 2005 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2005 American Chemical Society (ACS)

=> display history full 11-

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FILE 'LREGISTRY' ENTERED AT 14:33:14 ON 13 APR 2005
L1
                STR
     FILE 'REGISTRY' ENTERED AT 14:46:04 ON 13 APR 2005
L2
              4 SEA SSS SAM L1
                SCR 1860
L3
L4
             16 SEA SSS SAM L1 AND L3
           1518 SEA SSS FUL L1 AND L3
L5
                SAV L5 LE912/A
     FILE 'LREGISTRY' ENTERED AT 14:51:11 ON 13 APR 2005
L6
                STR L1
L7
                STR L6
                STR L6
L8
Ь9
                STR L6
L10
                STR L6
L11
                STR L8
     FILE 'REGISTRY' ENTERED AT 15:17:30 ON 13 APR 2005
L12
             0 SEA SUB=L5 SSS SAM L6
             13 SEA SUB=L5 SSS FUL L6
L13
               SAV L13 LE912A/A
            38 SEA SUB=L5 SSS SAM L7
L14
            944 SEA SUB=L5 SSS FUL L7
L15
                SAV L15 LE912B/A
            46 SEA SUB=L5 SSS SAM L9
L16
           1125 SEA SUB=L5 SSS FUL L9
L17
                SAV L17 LE912C/A
              2 SEA SUB=L5 SSS SAM L10
L18
             51 SEA SUB=L5 SSS FUL L10
L19
                SAV L19 LE912D/A
L20
            32 SEA SUB=L5 SSS SAM L11
            719 SEA SUB=L5 SSS FUL L11
L21
                SAV L21 LE912E/A
L22
            305 SEA (AG(L)X)/ELS (L) 2/ELC.SUB
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FILE 'LCA' ENTERED AT 15:26:20 ON 13 APR 2005

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720 SEA PHOTOG? OR IMAGE# OR IMAGING# OR PHOTOIMAG? OR
L23
                REPROG?
L24
            116 SEA ((SILVER# OR AG)(W)(HALIDE# OR MONOHALIDE# OR
                DIHALIDE# OR FLUORIDE# OR MONOFLUORIDE# OR DIFLUORIDE#
                OR CHLORIDE# OR MONOCHLORIDE# OR BROMIDE# OR DICHLORIDE#
                OR DIBROMIDE# OR IODIDE# OR MONOIODIDE# OR DIIODIDE#))/BI
                , AB
L25
            113 SEA (AGX OR AGX2 OR AGF OR AGF2 OR AGCL OR AGCL2 OR AGBR
                OR AGBR2 OR AGI OR AGI2)/BI, AB
     FILE 'HCA' ENTERED AT 15:28:52 ON 13 APR 2005
L26
          85669 SEA L22 OR L24 OR L25 OR AGX
L27
             17 SEA L13
L28
            409 SEA L15
L29
            403 SEA L17
L30
             58 SEA L19
            290 SEA L21
L31
            16 SEA L27 AND L26
L32
            16 SEA L27 AND (L23 OR 74/SC,SX)
L33
L34
            16 SEA L32 AND L33
L35
            55 SEA L30 AND L26
L36
            57 SEA L30 AND (L23 OR 74/SC,SX)
L37
            55 SEA L35 AND L36
L38
            316 SEA L28 AND L26
           306 SEA L29 AND L26
L39.
L40
            203 SEA L31 AND L26
L41
           297 SEA L38 AND L39
L42
           199 SEA L38 AND L40
L43
            203 SEA L39 AND L40
L44
           199 SEA L38 AND L39 AND L40
L45
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L47
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L48
          6185 SEA HOSOKAWA ?/AU
L49
         21284 SEA SHIMADA ?/AU
L50
         26233 SEA UCHIDA ?/AU
L51
          1487 SEA ISHIWATA ?/AU
            833 SEA KAWAGISHI ?/AU
L52
L53
              1 SEA L48 AND L49 AND L50 AND L51 AND L52
                SEL L53 1 RN
     FILE 'REGISTRY' ENTERED AT 17:36:32 ON 13 APR 2005
L54
             22 SEA (152827-78-6/BI OR 152827-79-7/BI OR 573711-26-9/BI
L55
              0 SEA L54 AND L5
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FILE 'LCA' ENTERED AT 17:37:29 ON 13 APR 2005

L56 38 SEA (FILM? OR PHOTOG? OR INCREAS? OR AUGMENT? OR FAST?
OR QUICK? OR ADDED OR ADDING# OR ADDS OR CHANG? OR VARY?
OR VARIAB? OR ALTER OR ALTERS OR ALTERED OR ALTERRING# OR ALTERING# OR MODIF? OR CONTROL? OR
GOVERN?) (2A) SPEED?

FILE 'HCA' ENTERED AT 17:54:48 ON 13 APR 2005
L57 22033 SEA (FILM? OR PHOTOG? OR INCREAS? OR AUGMENT? OR FAST?
OR QUICK? OR ADDED OR ADDING# OR ADDS OR CHANG? OR VARY?
OR VARIAB? OR ALTER OR ALTERS OR ALTERED OR ALTERING# OR ALTERING# OR MODIF? OR CONTROL? OR
GOVERN?) (2A) SPEED?

L58 1 SEA L47 AND L57

L59 468 SEA L5

L60 2 SEA L59 AND L57

L61 8 SEA L59 AND SPEED?

L62 25 SEA L27 OR L34 OR L58 OR L60 OR L61

L63 39 SEA L37 NOT L62

L64 164 SEA L47 NOT (L62 OR L63)

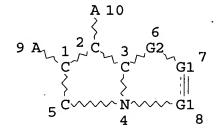
L65 21 SEA L62 AND (1900-2001/PRY OR 1900-2001/PY)

L66 39 SEA L63 AND (1900-2001/PRY OR 1900-2001/PY)

L67 152 SEA L64 AND (1900-2001/PRY OR 1900-2001/PY)

FILE 'REGISTRY' ENTERED AT 18:42:38 ON 13 APR 2005

=> d l13 que stat L1 STR



CH\(^\)A @14 15

VAR G1=C/N VAR G2=NH/14 NODE ATTRIBUTES:

NSPEC IS RC AT 9
NSPEC IS RC AT 10
NSPEC IS RC AT 15
DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

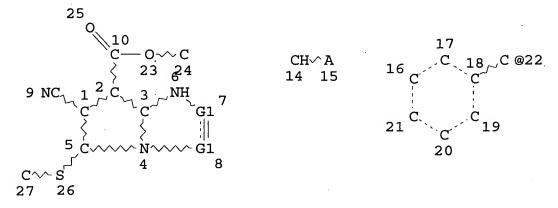
RING(S) ARE ISOLATED OR EMBEDDED NUMBER OF NODES IS 12

STEREO ATTRIBUTES: NONE

L3 SCR 1860

L5 1518 SEA FILE=REGISTRY SSS FUL L1 AND L3

L6 STR



VAR G1=22/N

NODE ATTRIBUTES:

NSPEC IS RC AT 15

NSPEC IS R AT 24

NSPEC IS RC AT 27

CONNECT IS E2 RC AT 26

DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED

NUMBER OF NODES IS 24

STEREO ATTRIBUTES: NONE

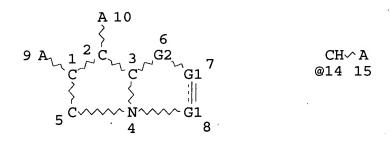
L13 13 SEA FILE=REGISTRY SUB=L5 SSS FUL L6

100.0% PROCESSED 67 ITERATIONS

SEARCH TIME: 00.00.01

67 ITERATIONS 13 ANSWERS

=> d l15 que stat L1 STR



VAR G1=C/N

VAR G2=NH/14

NODE ATTRIBUTES:

NSPEC IS RC AT 9
NSPEC IS RC AT 10
NSPEC IS RC AT 15
DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED

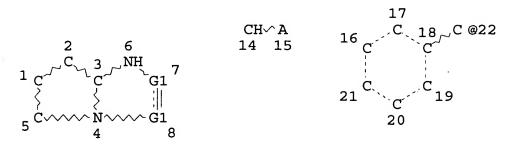
NUMBER OF NODES IS 12

STEREO ATTRIBUTES: NONE

L3 SCR 1860

L5 1518 SEA FILE=REGISTRY SSS FUL L1 AND L3

L7 STR



VAR G1=22/N

NODE ATTRIBUTES:

NSPEC IS RC AT 15

DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED

NUMBER OF NODES IS 17

STEREO ATTRIBUTES: NONE

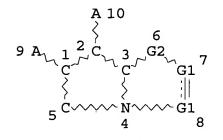
L15 944 SEA FILE=REGISTRY SUB=L5 SSS FUL L7

100.0% PROCESSED 1332 ITERATIONS

SEARCH TIME: 00.00.01

944 ANSWERS

=> d l17:que stat
L1 STR



CH\(^A\) @14\ 15

VAR G1=C/N

VAR G2=NH/14

NODE ATTRIBUTES:

NSPEC IS RC AT 9

NSPEC IS RC AT 10 NSPEC IS RC AT 15

DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED

NUMBER OF NODES IS 12

STEREO ATTRIBUTES: NONE

L3 SCR 1860

L5 1518 SEA FILE=REGISTRY SSS FUL L1 AND L3

L9 STR

2 6 14 15
9 NC 1 C 3 NH 7
C G1
C G1
C G1
A 14 15

VAR G1=C/N

NODE ATTRIBUTES:

1125 ANSWERS

NSPEC IS RC AT 15
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED

NUMBER OF NODES IS 11

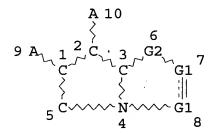
STEREO ATTRIBUTES: NONE

L17 1125 SEA FILE=REGISTRY SUB=L5 SSS FUL L9

100.0% PROCESSED 1266 ITERATIONS

SEARCH TIME: 00.00.01

=> d l19 que stat L1 STI



CH\(^A\) @14\ 15

VAR G1=C/N

VAR G2=NH/14

NODE ATTRIBUTES:

NSPEC IS RC AT 9 NSPEC IS RC AT 10

NSPEC IS RC AT 15

DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED

NUMBER OF NODES IS 12

STEREO ATTRIBUTES: NONE

L3 SCR 1860

L5 1518 SEA FILE=REGISTRY SSS FUL L1 AND L3

L10 STR

51 ANSWERS

VAR G1=C/N VPA 26-5/2 U NODE ATTRIBUTES:

NSPEC IS RC AT 15
NSPEC IS RC AT 27
CONNECT IS E2 RC AT 26
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED NUMBER OF NODES IS 19

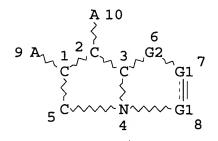
STEREO ATTRIBUTES: NONE

L19 51 SEA FILE=REGISTRY SUB=L5 SSS FUL L10

100.0% PROCESSED 673 ITERATIONS

SEARCH TIME: 00.00.01

=> d l21 que stat L1 STR



CH\sigma A @14 15

VAR G1=C/N VAR G2=NH/14

NODE ATTRIBUTES:

NSPEC IS RC ATIS RC ATNSPEC 10 IS RC AT15 NSPEC DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED

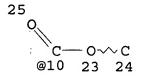
NUMBER OF NODES IS 12

STEREO ATTRIBUTES: NONE

L3 SCR 1860

L5 1518 SEA FILE=REGISTRY SSS FUL L1 AND L3

L11 STR



CH√A 14 15

VAR G1=C/N

NSPEC

VPA 10-2/5 U

NODE ATTRIBUTES:

IS RC NSPEC AT IS R

DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED

AT

24

NUMBER OF NODES IS

STEREO ATTRIBUTES: NONE

L21 719 SEA FILE=REGISTRY SUB=L5 SSS FUL L11

100.0% PROCESSED 1205 ITERATIONS

SEARCH TIME: 00.00.01

719 ANSWERS

=> file hca
FILE 'HCA' ENTERED AT 18:43:44 ON 13 APR 2005
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
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=> d 165 1-21 cbib abs hitstr hitind

- L65 ANSWER 1 OF 21 HCA COPYRIGHT 2005 ACS on STN

 138:178165 A color photothermographic element comprising a dye-forming system for forming a novel infrared dye. Reynolds, James Henry; Olson, Leif P.; Slusarek, Wojciech Kazimierz; Levy, David Howard (Eastman Kodak Company, USA). Eur. Pat. Appl. EP 1284440 A1 20030219, 69 pp. DESIGNATED STATES: R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK. (English). CODEN: EPXXDW. APPLICATION: EP 2002-78165 20020801. PRIORITY: US 2001-928834 20010813.
- The present invention is directed to a photothermog. element comprising at least one imaging layer with a pyrrolotriazole coupler and a developing agent, or precursor thereof, the combination of which is capable of forming an image record in the IR region of the light spectrum in response to a selected hue of visible light. This expedient leads to the formation of high quality images, esp. when scanning photothermog. elements in which the silver halide, metallic silver, and/or any org. silver salts have not been removed. Also disclosed is a method for photothermog. forming a developed image comprising an IR image record.

IT 497213-23-7

(coupler; color photothermog. element comprising dye-forming system for forming novel IR dye)

- RN 497213-23-7 HCA
- CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, 6-cyano-2-[4-(1,1-dimethylethyl)phenyl]-5-[(3-methoxy-3-oxopropyl)thio]-, 2,6-bis(1,1-dimethylethyl)-4-methylcyclohexylester (9CI) (CA INDEX NAME)

t-Bu
$$S-CH_2-CH_2-C-OMe$$
 CN t-Bu Me
 C t-Bu

IC ICM 5 G03C007-30

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

IT Photographic couplers

Photothermographic copying

(color photothermog. element comprising dye-forming system for forming novel IR dye)

IT 178743-91-4 188745-52-0 210965-03-0 497213-22-6 497213-23-7 497213-24-8 497213-25-9 497213-26-0

497213-27-1

(coupler; color photothermog. element comprising dye-forming system for forming novel IR dye)

L65 ANSWER 2 OF 21 HCA COPYRIGHT 2005 ACS on STN

137:331135 Heat-developable diazo recording material. Ikeda, Takami; Jinbo, Yoshihiro (Fuji Photo Film Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 2002321459 A2 20021105, 40 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 2001-125669 20010424.

AB The material has a heat-sensitive layer contg. at least the diazonium salt characterized by that .epsilon. .times. .phi. is .gtoreq.160 or 160-500 (.epsilon. = light absorption const.; .phi. = photolytic quantum yield at 450 nm, resp.) and the magenta coupler. It showed improved fixing rate for high speed recording.

IT 223734-03-0

(coupler; heat-developable diazo recording material contg. diazonium salt with controlled quantum yield and light absorption)

RN 223734-03-0 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, 6-cyano-2-(2-methylphenyl)-, 2,6-bis(1,1-dimethylethyl)-4methylcyclohexyl ester (9CI) (CA INDEX NAME)

IC ICM B41M005-30

ICS B41M005-26; B41M005-28

CC 74-10 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

IT 223734-03-0

(coupler; heat-developable diazo recording material contg. diazonium salt with controlled quantum yield and light absorption)

L65 ANSWER 3 OF 21 HCA COPYRIGHT 2005 ACS on STN

135:53457 Silver halide color photographic

material containing pyrrolotriazole cyan coupler. Tateishi, Keiichi; Mikoshiba, Takashi; Matsuda, Naoto (Fuji Photo Film Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 2001163887 A2 20010619, 75 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 2000-282530 20000918. PRIORITY: JP 1999-279838 19990930.

GI

$$Q = (R^5)_n$$

$$R^3R^4N$$

AB The material contains a coupler I [X = H, substituent to be released ... on coupling with an arom. primary amine color developer; R1, R2 = electron attractive group with Hammett's .sigma.p value .gtoreq.0.20; .sigma.p(R1) + .sigma.p(R2) .gtoreq.0.65; G1, G2 = N, Q (R3 = each (un) substituted alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkenyl, aryl, heterocycle; R4 = H, substituent linked with C; R3 and R4 may form a ring; R5 = substituent; n = 0-4); .gtoreq.1 of : G1-2= N; I may form a dimer or (co)polymer] in .gtoreq.1 layer on a support. The pyrrolotriazole compd. I (X = H, halo, C1-32 alkyloxy, C6-32 aryloxy, C1-32 alkylthio, C6-32 arylthio, C2-32 heterocyclic thio, C2-32 alkyloxycarbonyloxy, C7-32 aryloxycarbonyloxy, C1-32 carbamoyloxy, C3-32 heterocyclic carbonyloxy, 5- or 6-membered C2-32 N-contg. heterocycle linking to a coupling active site with N; R1, R2 = electron attractive group with Hammett's .sigma.p value .gtoreq.0.20; .sigma.p(R1) + .sigma.p(R2) .gtoreq.0.65; G1, G2 = N,Q) is also claimed. The material shows improved color reprodn., colored image stability, and processing stability.

IT 344941-80-6

(silver halide color photog.

material contg. pyrrolotriazole cyan coupler)

RN344941-80-6 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, 5-[[2-butoxy-5-(1,1,3,3-tetramethylbutyl)phenyl]thio]-2-[4-(4carboxy-1-piperidinyl)-3-[[[2-(octyloxy)-5-(1,1,3,3tetramethylbutyl)phenyl]sulfonyl]amino]phenyl]-6-cyano-, 7-[2,6-bis(1,1-dimethylethyl)-4-methylcyclohexyl] ester (9CI)

INDEX NAME)

PAGE 1-A

Me
$$C = CH_2 - CMe_3$$
 $C = CH_2 - CMe_3$
 $C = CH_2 - CMe_3$

PAGE 2-A

Me

IC ICM C07D487-04 ICS G03C007-38

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 28

ST **silver halide photog** cyan coupler pyrrolotriazole

IT Cyan couplers

(silver halide color photog.

material contg. pyrrolotriazole cyan coupler)

IT 344941-73-7 344941-74-8 344941-75-9 344941-76-0 344941-77-1

344941-78-2 344941-79-3 **344941-80-6** 344941-81-7 344941-82-8

(silver halide color photog.

material contg. pyrrolotriazole cyan coupler)

IT 344941-65-7P 344941-66-8P 344941-67-9P 344941-68-0P

344941-69-1P 344941-70-4P 344941-71-5P 344941-72-6P

344941-86-2P 344941-87-3P

(silver halide color photog.

material contg. pyrrolotriazole cyan coupler)

L65 ANSWER 4 OF 21 HCA COPYRIGHT 2005 ACS on STN

133:367787 Silver halide color photographic

material and image formation using same. Shimada, Yasuhiro; Makuta, Toshiyuki (Fuji Photo Film Co., Ltd., Japan).

Jpn. Kokai Tokkyo Koho JP 2000314947 A2 20001114, 70 pp.

(Japanese). CODEN: JKXXAF. APPLICATION: JP 1999-125256 19990430.

GI

$$R^1$$
 R^2
 X
 N
 NH
 R^3
 I
 R^3
 I

AB The title **photog.** material, possessing .gtoreq.1 photog. constitutive layers on a support, contains a coloring reducing agent of the formula I [C.alpha. = C; R = (substituted) alkyl, aryl, heterocyclic group; Q = atoms required to form an unsatd. ring along with C.alpha.] in .gtoreq.1 of the layers and .gtoreq.1 dye-forming coupler and .gtoreq.1 non-color-developing coupler of the formula II (R1, R2 = electron-attracting group; R3 = substituent; X = alkyl, aryl, heterocyclic group, alkoxy, aryloxy, acylamino, sulfonamide, phosphonamide, alkylthio, arylthio, ureido, urethane) in .qtoreq.1 of the layers. The material is scanning-exposed for 10-8-10-4 s per 1 pixel and developed with an alk. soln. essentially contg. no developing agent to form images. The material capable of being processed with stable alk. solns. shows excellent storage stability and provides durable color images.

IT 306766-21-2 306766-23-4

(non-dye-forming coupler; photog. film contg. coloring reducing agent, dye-forming coupler, and non-dye-forming coupler,)

RN 306766-21-2 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, 5-[[4-(acetylamino)phenyl]thio]-6-cyano-2-[4-(1,1-dimethylethyl)phenyl]-, 2,6-bis(1,1-dimethylethyl)-4-methylcyclohexyl ester (9CI) (CA INDEX NAME)

RN 306766-23-4 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, 6-cyano-2-(2-methoxyphenyl)-5-[[2-(octyloxy)phenyl]thio]-, 2,6-bis(1,1-dimethylethyl)-4-methylcyclohexyl ester (9CI) (CA INDEX NAME)

IC ICM G03C007-392

ICS C09B029-36; G03C001-42; G03C001-74; G03C005-08; G03C007-38; G03C007-388; G03C007-407; G03C007-46; C07D487-04

CC 74-2 (Radiation Chemistry, Photochemistry, and

Photographic and Other Reprographic Processes) ST photog film coloring reducing agent; non dye forming coupler photog film; alk processing soln photog ITPhotographic couplers Photographic films (photog. film contg. coloring reducing agent, dye-forming coupler, and non-dye-forming coupler) IT Photographic processing (photog. film processed with alk. soln. contg. no developing agent) IT 111130-66-6 142859-67-4 185841-53-6 185841-55-8 185841-57-0 192931-81-0 306766-08-5 (dye-forming coupler; photog. film contg. coloring reducing agent, dye-forming coupler, and non-dye-forming coupler) 306766-16-5 IT 306766-12-1 306766-14-3 306766-17-6 306766-19-8 306766-21-2 306766-23-4 (non-dye-forming coupler; photog. film contg. coloring reducing agent, dye-forming coupler, and non-dye-forming coupler) IT 182296-98-6 182297-11-6 191231-09-1 192567-35-4 215536-29-1 306766-02-9 (reducing agent; photog. film contg. coloring reducing agent, dye-forming coupler, and non-dye-forming coupler) ANSWER 5 OF 21 HCA COPYRIGHT 2005 ACS on STN L65 131:122889 Silver halide color photographic material. Mikoshiba, Hisashi; Soejima, Shin; Shimada, Yasuhiro; Takahashi, Osamu; Deguchi, Yasuaki (Fuji Photo Film Co., Ltd., Japan). Eur. Pat. Appl. EP 932079 A1 19990728, 174 pp. DESIGNATED STATES: R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO. (English). CODEN: APPLICATION: EP 1999-101049 19990122. PRIORITY: JP 1998-25208 19980123; JP 1998-76596 19980310; JP 1998-78512 19980312; JP 1998-80368 19980312; JP 1998-288708 19980928. There is disclosed a silver halide color AB photog. material comprising a compd. of formula R1C(R7)n[C(R2)(R3)OCOCR4=CR5R6]3-n wherein R1 is a hydrogen atom, an alkyl group having 1 to 30 carbon atoms, an alkenyl group having 2 to 30 carbon atoms, or an aryl group; R2, R3, R4, R5, R6, and R7 each independently represents a hydrogen atom or an alkyl group having 1 to 30 carbon atoms; and n is 0 or 1. The color photog. material provide cyan images of excellent fastness. IT 232947-60-3 (color photog. emulsions for improved cyan dye

image formation contg. vinyl compds. and)

1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid,

6-cyano-2-(2-methylphenyl)-5-[(2,4,6-tribromophenyl)thio]-,

RN

CN

232947-60-3

2,6-bis(1-methylethyl)phenyl ester (9CI) (CA INDEX NAME)

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IC ICM G03C007-30
ICS G03C007-38
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ICA C07C069-533

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

ST photog material cyan image improved fastness; vinyl stabilizer color photog material

IT Photographic emulsions

(color; contg. vinyl compds. and pyrrolotriazole cyan dye formers)

IT Photographic stabilizers

(vinyl compds. for color **photog**. materials for forming cyan **images** of improved fastness)

IT 1820-47-9 3290-92-4 3524-68-3 4986-89-4 15625-89-5, Trimethylolpropane triacrylate 85391-84-0 232947-49-8 232947-50-1 232947-51-2 232947-52-3 232947-53-4 232947-54-5

image formation contg. pyrrolotriazole couplers and)

\IT 31037-84-0 99141-89-6 117827-06-2 151019-65-7 178743-91-4 184947-09-9 188745-52-0 200049-62-3 200110-90-3 20.0137-20-8 211051-73-9 211051-76-2 219553-72-7 232947-55-6 232947-56-7 232947-57-8 232947-58-9 232947-59-0 232947-60-3 232951-89-2

(color **photog**. emulsions for improved cyan dye **image** formation contg. vinyl compds. and)

(color photog. emulsions for improved cyan dye

IT 25035-82-9, Butyl acrylate-methacrylic acid copolymer 140201-11-2 211051-99-9 211052-01-6 211052-05-0 220323-13-7 232947-62-5 232947-63-6 232947-64-7 232947-65-8 232947-66-9 232951-90-5 232951-91-6

(color **photog**. emulsions for improved cyan dye **image** formation contg. vinyl compds., pyrrolotriazole cyan couplers and)

IT 190436-30-7P 194419-30-2P 194419-31-3P 200049-66-7P (prepn. and reaction in prepg. pyrrolotriazole cyan photog. coupler)

IT 4445-11-8P 73923-17-8P 232947-67-0P (prepn. and reaction in prepg. reagent for color photog . materials)

IT 202483-63-4P

(prepn. and use in color **photog**. emulsions for improved cyan dye **image** formation)

IT 105-34-0, Methyl cyanoacetate 15159-40-7, 4-Morpholinecarbonyl chloride 163119-16-2 194419-32-4 (reaction in prepg. pyrrolotriazole cyan **photog**. coupler)

IT 106-65-0, Methyl succinate (reaction in prepg. reagent for color photog. materials)

L65 ANSWER 6 OF 21 HCA COPYRIGHT 2005 ACS on STN

129:168052 Silver halide color photographic material containing a pyrroloazole coupler. Yamazaki, Takayasu (Fuji Photo Film Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 10198011 A2

19980731 Heisei, 46 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1997-15916 19970113.

GI

AB Claimed color photog. material having a support and a component layer contg. an Ag halide emulsion, a developing agent, a compd. to form a dye by coupling with the oxidized developing agent and the binder, which develop color image by being contacted with the processing sheet contg. a base or base precursor followed by heating the stack, is characterized in (1) that at least one of the emulsion contains, in the amt. of 50% of total projected area, AgCl-dominant (AgCl .gtoreq.50 mol%) tabular grains with (100) surface and aspect ratio of .gtoreq.2.0, and (2) that a pyrroloazole compd. I (Z =

azole ring; R1, R2 = electron-attracting group with Hammett's .sigma..rho. .gtoreq.0.3, X = H, leaving group to be released by the coupling reaction with the oxidized developing agent). The photog. material is thermally processed without using a developer soln. Compd. I is a cyan coupler with high developability and low fog. Thus, coupler I (Z = 3 - [4 - (2 - octyl - 5 - octyloxy-phenylsulfoamino) - 2 - methyl-phenoxyethyl] - 1, 2, 4 - triazole ring; R1 = methoxycarbonyl; R2 = CN; <math>X = H) was incorporated in the thermal development type color photog. material.

IT 158293-27-7 181364-68-1 211053-65-5 211053-66-6 211053-67-7 211053-68-8 211053-69-9 211053-70-2 211053-71-3

(coupler; color photog. material contg. pyrroloazole coupler to improve speed/fog ratio and color developability)

RN 158293-27-7 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, 2-[2-[2-[2,4-bis(1,1-dimethylpropyl)phenoxy]-1oxobutyl]amino]phenyl]-6-cyano-, 1-methylethyl ester (9CI) (CA INDEX NAME)

RN 181364-68-1 HCA
CN 1H-Pyrrolo[2,1-c]-1,2,4-triazole-6-carboxylic acid,
3-[4-[[2-[2,4-bis(1,1-dimethylpropyl)phenoxy]-1oxobutyl]amino]phenyl]-7-cyano-, ethyl ester (9CI) (CA INDEX NAME)

RN 211053-65-5 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, 6-cyano-2-[2-ethoxy-5-[[[5-octyl-2-(octyloxy)phenyl]sulfonyl]amino]p henyl]-, 2,6-bis(1,1-dimethylethyl)-4-methylcyclohexyl ester (9CI) (CA INDEX NAME)

RN 211053-66-6 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, 6-cyano-2-[2-[(2-hexyldecyl)oxy]phenyl]-, 2,6-bis(1,1-dimethylethyl)-4-methylcyclohexyl ester (9CI) (CA INDEX NAME)

RN 211053-67-7 HCA

CN 1H-Pyrrolo[2,1-c]-1,2,4-triazole-7-carboxylic acid,
3-[3-[2-[2,4-bis(1,1-dimethylpropyl)phenoxy]-1oxobutyl]amino]phenyl]-6-cyano-, 2,4-bis(1,1-dimethylpropyl)phenyl
ester (9CI) (CA INDEX NAME)

RN 211053-68-8 HCA
CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid,
6-cyano-2-[4-methyl-3-[[[2-(octyloxy)-5-(1,1,3,3tetramethylbutyl)phenyl]sulfonyl]amino]phenyl]-,
2,6-bis(1,1-dimethylethyl)cyclohexyl ester (9CI) (CA INDEX NAME)

RN 211053-69-9 HCA

CN 1,3-Benzenedicarboxylic acid, 5-[[[3-[[[5-[7-[[[2,6-bis(1,1-dimethylethyl)-4-methylcyclohexyl]oxy]carbonyl]-6-cyano-1H-pyrrolo[1,2-b][1,2,4]triazol-2-yl]-2-methylphenyl]amino]sulfonyl]-4-(octyloxy)phenyl]amino]sulfonyl]-, bis(2-cyanobutyl) ester (9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 1-B

RN 211053-70-2 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, 6-cyano-2-[3-[[2-[(dodecylsulfonyl)amino]benzoyl]amino]-4methylphenyl]-, ethyl ester (9CI) (CA INDEX NAME)

RN 211053-71-3 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, 6-cyano-2-[4-methyl-3-[[2-[2-[[2-[(phenylsulfonyl)amino]benzoyl]amino]ethoxy]-5-(1,1,3,3-tetramethylbutyl)phenyl]sulfonyl]amino]phenyl]-, cyclohexyl ester (9CI) (CA INDEX NAME)

IC ICM G03C007-38

ICS G03C001-035; G03C001-42; G03C007-00; G03C007-392; G03C008-40

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

IT Cyan couplers

Photographic emulsions

(color photog. material contg. pyrroloazole coupler to improve speed/fog ratio and color developability)

IT 158293-27-7 181364-68-1 211053-65-5

211053-66-6 211053-67-7 211053-68-8

211053-69-9 211053-70-2 211053-71-3

(coupler; color photog. material contg. pyrroloazole coupler to improve speed/fog ratio and color developability)

L65 ANSWER 7 OF 21 HCA COPYRIGHT 2005 ACS on STN

129:10563 Silver halide color photographic photosensitive material and image forming method using same. Kawai, Kiyoshi (Fuji Photo Film Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 10097040 A2 19980414 Heisei, 51 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1997-158764 19970616. PRIORITY: JP 1996-154622 19960614.

GI

AB The photog. material comprises at least three different silver halide emulsion layers having different color sensitivity among them, and a hydrophilic colloidal layer, wherein the cyan coupler silver halide emulsion layer comprises pigment forming coupler I (R1-5 = H, substituent; Z = ring forming non metal element group; X = heterocyclic, substituted amino group, aryl; Y = H, substituent; R6 = substituent). At least one of the photosensitive layer contg. the cyan coupler comprises .gtoreq.80 % silver halide salt and the silver halide salt is a tabular silver halide particle having (100) main face. The photog. photosensitive material provides the rapid processing speed, a sharp image, and the improved dependency on the photog. material treatment, and is used for scanning exposition by a semiconductor laser beam.

IT 188745-52-0 200049-64-5 200049-65-6

(pigment forming coupler for silver halide color photog. photosensitive material)

RN 188745-52-0 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, 6-cyano-2-[4-(1,1-dimethylethyl)phenyl]-5-[(4-morpholinylcarbonyl)oxy]-, 2,6-bis(1,1-dimethylethyl)-4-methylcyclohexyl ester (9CI) (CA INDEX NAME)

RN 200049-64-5 HCA
CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid,
6-cyano-2-[4-methyl-3-[[[2-(octyloxy)-5-(1,1,3,3-tetramethylbutyl)phenyl]sulfonyl]amino]phenyl]-5-[(4-morpholinylcarbonyl)oxy]-, 2,6-bis(1,1-dimethylethyl)-4-[(dodecyloxy)methyl]cyclohexyl ester (9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 1-B

Me
$$Me^-C-CH_2-CMe_3$$
 $O-(CH_2)_7-Me$

RN 200049-65-6 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, 6-cyano-2-[3-[(2-hexyl-1-oxodecyl)amino]-4-methylphenyl]-5-[(4-morpholinylcarbonyl)oxy]-, 2,6-bis(1,1-dimethylethyl)-4-methylcyclohexyl ester (9CI) (CA INDEX NAME)

IC ICM G03C007-38

ICS G03C001-035; G03C001-83; G03C005-08; G03C007-00

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

IT 188745-52-0 200049-64-5 200049-65-6

(pigment forming coupler for silver halide color photog. photosensitive material)

L65 ANSWER 8 OF 21 HCA COPYRIGHT 2005 ACS on STN

128:174065 Silver halide color photographic material having red-sensitive layer with some blue/green sensitivity, and the image-forming process. Hayashi, Yasuhiro (Fuji Photo Film Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 10020462 A2

19980123 Heisei, 45 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1996-186895 19960628.

GΙ

AB Claimed color photog. material is characterized by (1) that .gtoreq.1 of cyan-coupler-contq. red-sensitive layer(s) contains, in the amt. of .gtoreq.50% of total grain-projected areas, AgCl-dominant grains (AgCl content .gtoreq.95 mol%) comprising (100) surfaces as the major plane and spectrally sensitized by red-sensitizing and green- and/or blue-sensitizing dyes, and (2) that the cyan coupler incorporated in the layer(s) is represented by the formula I (Za = -CR3:, -N:; when Za = -N:, Zb = CR3, and when Za = -CR:, Zb = -N:; R1, R2 = electron-attractive group with Hamet's sigma const. of 0.2-1.0; R3 = substituent; R4, R5 = H, aliph., aryl, heterocyclic group; R4 and R5 may be combined to form a ring). Also claimed is the image-forming process in which the photog. material is exposed by a scanning mode, followed by chromogenic development. Preferable scanning procedure is by laser beam scanning. rapid developability and good storage stability, and particularly it improves color reprodn. quality of shadow details, which is prone to be insufficient when the coupler provides cyan color with high purity. Thus, a multilayer color neg. film comprising AgCl-dominant emulsion layers was added by 2-tert-butyl-5-diethylaminocarbonyloxy-6-cyano-7-(2,6-di-tert-butyl-4-methyl-cyclohexyloxycarbonyl)pyrrolo[1,2d]imidazole in both low and high speed red-sensitive layers which were spectrally sensitized to red and somewhat to green.

IT 178744-03-1 184773-62-4 188745-52-0 202927-10-4 202927-11-5 202927-12-6 202927-13-7 202927-14-8 202927-15-9 202927-16-0

(coupler; color photog. material having red-sensitive layer with

some blue/green sensitivity for scanning-mode processing)

RN 178744-03-1 HCA

CN 1H-Pyrrolo[2,1-c]-1,2,4-triazole-7-carboxylic acid, 6-cyano-3-(1,1-dimethylethyl)-5-[(4-morpholinylcarbonyl)oxy]-, 2,6-bis(1,1-dimethylethyl)-4-methylcyclohexyl ester (9CI) (CA INDEX NAME)

RN 184773-62-4 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, 6-cyano-5-[(4-morpholinylcarbonyl)oxy]-2-[4-[[[2-(octyloxy)-5-(1,1,3,3-tetramethylbutyl)phenyl]sulfonyl]amino]phenyl]-, 2,6-bis(1,1-dimethylethyl)-4-methylcyclohexyl ester (9CI) (CA INDEX NAME)

Me Bu-t NC NH S O O (CH2)
$$7$$
 Me t-Bu

RN 188745-52-0 HCA
CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid,
6-cyano-2-[4-(1,1-dimethylethyl)phenyl]-5-[(4morpholinylcarbonyl)oxy]-, 2,6-bis(1,1-dimethylethyl)-4methylcyclohexyl ester (9CI) (CA INDEX NAME)

RN 202927-10-4 HCA
CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid,
6-cyano-2-(1,1-dimethylethyl)-5-[(4-morpholinylcarbonyl)oxy]-,
2,6-bis(1,1-dimethylethyl)cyclohexyl ester (9CI) (CA INDEX NAME)

RN 202927-11-5 HCA

CN 1H-Benzimidazole-1-carboxylic acid, 2-[3-[[2-[2,4-bis(1,1-dimethylethyl)phenoxy]-1-oxooctyl]amino]phenyl]-6-cyano-7-[[(2,4,6-trimethylcyclohexyl)oxy]carbonyl]-1H-pyrrolo[1,2-b][1,2,4]triazol-5-yl ester (9CI) (CA INDEX NAME)

RN 202927-12-6 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-6-carboxylic acid, 7-cyano-5-[[(3,5-dimethyl-4H-1,2,4-triazol-4-yl)carbonyl]oxy]-2-[1-methyl-2-[(1-oxotridecyl)amino]ethyl]-, ethyl ester (9CI) (CA INDEX NAME)

RN 202927-13-7 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, 6-cyano-2-(1,1-dimethylethyl)-5-[[(diphenylamino)carbonyl]oxy]-, 2,6-bis(1,1-dimethylethyl)cyclohexyl ester (9CI) (CA INDEX NAME)

RN 202927-14-8 HCA

CN 1H-Pyrrolo[2,1-c]-1,2,4-triazole-7-carboxylic acid, 6-cyano-5-[[(dicyclohexylamino)carbonyl]oxy]-3-(1,1-dimethylethyl)-, 2,6-bis(1,1-dimethylpropyl)-4-methylcyclohexyl ester (9CI) (CA INDEX NAME)

RN 202927-15-9 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, 5-chloro-6-cyano-2-[2-(octyloxy)-5-[[[2-(octyloxy)-5-(1,1,3,3-tetramethylbutyl)phenyl]sulfonyl]amino]phenyl]-, 2,6-bis(1,1-dimethylethyl)cyclohexyl ester (9CI) (CA INDEX NAME)

RN 202927-16-0 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, 2-[4-[[2-[[2,4-bis(1,1-dimethylpropyl)cyclohexyl]oxy]-1oxobutyl]amino]phenyl]-6-cyano-5-[(4-morpholinylcarbonyl)oxy]-, 1-heptylnonyl ester (9CI) (CA INDEX NAME)

IC ICM G03C007-38

ICS G03C001-00; G03C001-035; G03C001-09; G03C001-12; G03C005-08; G03C007-00

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

IT 178744-03-1 184773-62-4 188745-52-0

202927-10-4 202927-11-5 202927-12-6

202927-13-7 202927-14-8 202927-15-9

202927-16-0

(coupler; color photog. material having red-sensitive layer with some blue/green sensitivity for scanning-mode processing)

Ι

L65 ANSWER 9 OF 21 HCA COPYRIGHT 2005 ACS on STN

126:310423 Silver halide photographic material containing silver chloride-dominant tabular grains and developing agent. Yamashita, Seiji; Nakamura, Takemare; Nakamura, Koichi (Fuji Photo Film Co Ltd, Japan). Jpn. Kokai Tokkyo Koho JP 09061960 A2 19970307 Heisei, 41 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1996-155741 19960617. PRIORITY: JP 1995-171602 19950615.

GΙ

$$CN$$
 CN
 CN
 CN
 CN
 CON
 CON

AB Claimed photog. material contains (1) tabular grains with the aspect ratio of .gtoreq.2 and contg. .gtoreq.20 mol.% of AgCl in the amt. of .gtoreq.50 % of total projected area, (2) a developing agent and (3) a compd. forming a dye in the developing process. has high speed and is processed with a small amt. of replenishment, generating little amt. of waste discharge. Ιt provides an image comprising silver and dye by a 90 s rapid process, and suitably used for x-ray diagnostic purposes. Thus, a medical x-ray film having Ag(Br,Cl) emulsion layers on both sides of polyethylene terephthalate support and contq. a developing agent (I) and 1-(1-phenoxy-1-cyano-acetoamino)-2-chloro-5-n-dodecyloxycarbonyl-(benzene) (coupler) had the mentioned advantage when developed with hydroquinone-free soln. contq. 1-phenyl-4-methyl-4-hydroxymethyl-3pyrazolidine (pH 12).

IT 182297-38-7

CN

(coupler; high-speed and low-replenishment photog. material contg. silver chloride-dominant tabular grains)

RN 182297-38-7 HCA

Carbonic acid, 2-[5-chloro-2-[[[[2-(tetradecyloxy)phenyl]amino]carbonyl]amino]phenyl]-7-cyano-6-(phenylsulfonyl)-1H-pyrrolo[1,2-b][1,2,4]triazol-5-yl methyl ester (9CI) (CA INDEX NAME)

IC ICM G03C001-42

ICS G03C001-00; G03C001-035; G03C001-46; G03C005-17; G03C005-26; G03C007-32; G21K004-00

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

IT Photographic couplers

```
Radiographic films
        (high-speed and low-replenishment photog. material
        contg. silver chloride-dominant tabular grains)
IT
     63149-13-3
                  99661-33-3
                               111130-66-6
                                             152827-98-0
                                               189224-02-0
                   189224-00-8
                                 189224-01-9
     182297-38-7
     189224-03-1
                   189224-04-2
                                 189224-05-3
        (coupler; high-speed and low-replenishment photog.
        material contq. silver chloride-dominant tabular grains)
     182297-11-6
                   189223-96-9
                                 189223-98-1
IT
       (developing agent; high-speed and low-replenishment
        photog. material contg. silver chloride-dominant tabular grains)
                    182297-00-3P
                                   182297-04-7P
IT
     182296-98-6P
                                                  182297-13-8P
     183130-83-8P
                    189223-97-0P
        (developing agent; high-speed and low-replenishment
        photog. material contg. silver chloride-dominant tabular grains)
IT
                   182296-77-1P
                                  182296-79-3P
                                                 182296-81-7P
     58666-90-3P
     182296-83-9P
                    182296-85-1P
                                   182296-87-3P
                                                  182296-90-8P
     182296-93-1P
        (hydrazine compds. from; for high-speed and
        low-replenishment photog. material)
     110-78-1, Propylisocyanate
                                  302-01-2, Hydrazine, reactions
                            1885-14-9, Phenylchlorocarbonate
     613-94-5
                1878-18-8
                                                               5188-07-8,
     Sodium methylmercaptan
                              61053-26-7
                                           139152-08-2,
     1,2-Dichloro-4,5-dicyanobenzene
                                       154136-31-9
                                                     182626-16-0
     189223-99-2
        (hydrazine compds. from; for high-speed and
        low-replenishment photog. material)
    ANSWER 10 OF 21 HCA COPYRIGHT 2005 ACS on STN
L65
123:97720 Silver halide color photographic
     material.. Matsuoka, Koushin; Shimada, Yasuhiro; Yoneyama, Hiroyuki
     (Fuji Photo Film Co., Ltd., Japan). Eur. Pat. Appl. EP 628867 A1
     19941214, 87 pp. DESIGNATED STATES: R: DE, FR, GB, NL.
     (English). CODEN: EPXXDW. APPLICATION: EP 1994-108697 19940607.
     PRIORITY: JP 1993-163254 19930608.
GI
```

NC
$$CO_2$$
 Z R^5 Z R^4 N N N N R^6

AB A Ag halide color photog. material comprises a support having provided thereon .gtoreq.1 layer contg. .gtoreq.1 cyan coupler I [R1 and R2 each = a substituent except Me group; R3, R4, R5 and R6 each = a H atom or a substituent; Z = a nonmetallic atom or a nonmetallic at. group necessary for forming a ring and the nonmetallic at. group of Z may optionally be substituted by substituent(s); and X = a H atom, or a group of splitting off from the formula by coupling reaction with an oxidn. product of an arom. primary amine color developing agent]. The material provides excellent color hue without color fluctuation.

Τ

IT 165178-20-1

(cyan coupler; **photog** material with excellent color hue without color fluctuation)

RN 165178-20-1 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid,
2-[2-[2-[2,4-bis(1,1-dimethylpropyl)phenoxy]-1-oxooctyl]amino]-3methoxyphenyl]-5-[(2-carboxyphenyl)thio]-6-cyano-,
7-[2,6-bis(1,1-dimethylpropyl)-4-methylcyclohexyl] ester (9CI) (CA
INDEX NAME)

PAGE 1-A

PAGE 2-A

- IC ICM G03C007-38 ICS C07D487-04
- CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
 Section cross-reference(s): 41
- ST photog coupler cyan
- IT Photographic couplers

(cyan, photog material with excellent color hue without color fluctuation)

IT 165178-17-6 165178-18-7 165178-19-8 **165178-20-1** 165178-21-2 165178-22-3 165337-56-4 165337-57-5

(cyan coupler; **photog** material with excellent color hue without color fluctuation)

IT 165178-13-2P 165178-14-3P

(cyan coupler; **photog** material with excellent color hue without color fluctuation)

IT 165178-15-4P 165178-16-5P

(photog material with excellent color hue without color fluctuation)

L65 ANSWER 11 OF 21 HCA COPYRIGHT 2005 ACS on STN

122:226648 Silver halide color photographic

material with high-density and superior image fastness.
Nakajo, Kyoshi; Obayashi, Keiji; Ichijima, Yasushi; Kawagishi,
Toshio; Ooki, Nobutaka; Shimada, Yasuhiro (Fuji Photo Film Co Ltd,
Japan). Jpn. Kokai Tokkyo Koho JP 06250356 A2 19940909
Heisei, 108 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP
1993-54626 19930222.

GI

AB The title color photog. material contains compd.

A1-(Time)a-DI and(or) A2-(Time)a-DI (A1 contains a diffusion-resistant group; A2 contains no diffusion-resistant group; both A1 and A2 are able to release (Time)a-DI on reaction with an oxidized arom. primary amine developer; Time is a timing group capable of cleavaging DI after released from A1 or A2; DI is a developer suppressor; a = 1, 2; 2 (Time) may be same or different when a = 2) and a cyan coupler I and(or) II (Za = NH, CHR13; Zb, Zc = C(R14), N; R11-13 = electron-attracting group of Hammett's substituent const. .sigma.p .gtoreq.0.2 with the sum of .sigma.p for R11 and R12 being .gtoreq.0.65; R14, R21 = H, substituent; R22 = substituent; Z2 = non-metallic atoms required to form N-contg. 6-membered heterocycle that has at least a releasing group; X1, X2 = H, group releasable on reaction with an oxidized arom. primary amine

developer).

IT 162006-31-7

(cyan coupler with DIR compd. contained in color **photog** . film)

RN 162006-31-7 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, 6-cyano-2-[3-[(methylsulfonyl)amino]phenyl]-5-[(pentachlorophenyl)thio]-, 2,4-bis(1,1-dimethylpropyl)phenyl ester (9CI) (CA INDEX NAME)

IC ICM G03C007-305

ICS C07D487-04; G03C007-38

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

ST color **photog** material cyan coupler; development inhibitor releasing compd **photog** material

IT Photographic couplers

(cyan coupler with DIR compd. contained in **photog.** film)

IT Photographic films

(color, contg. specified DIR compd. and cyan coupler)

IT 143150-16-7 144291-03-2 150307-10-1 160508-28-1 160544-71-8 161004-11-1 161004-14-4 161004-15-5 161004-18-8 161004-19-9 161004-20-2 161004-23-5 161069-19-8 161069-33-6 161069-37-0 161069-41-6 161069-42-7 161098-44-8 161098-47-1 162006-25-9 162006-26-0 162006-27-1

(DIR compd. with cyan coupler contained in color **photog** . film)

IT 87947-03-3 105488-33-3 105504-92-5 119204-27-2 121605-08-1 121941-10-4 122415-86-5 123472-12-8 139981-57-0 148010-47-3 149309-79-5 152962-25-9 156233-78-2 156233-79-3 162006-35-1 162006-36-2 162006-37-3 162006-38-4 162006-39-5

(bleaching promoter releasing compd. contained in color photog. film)

IT 151645-05-5 154021-50-8 154105-25-6 156740-16-8 156772-90-6 157578-29-5 157516-73-9 157516-78-4 157516-82-0 157578-30-8 157578-32-0 158894-70-3 162006-28-2 162006-29-3 162006-30-6 162006-32-8 162006-33-9 162006-31-7 162006-34-0 162072-42-6

(cyan coupler with DIR compd. contained in color **photog** . film)

L65 ANSWER 12 OF 21 HCA COPYRIGHT 2005 ACS on STN

122:68175 Silver halide color photographic

material with high sensitivity and pressure resistance. Kobayashi, Hidetoshi (Fuji Photo Film Co Ltd, Japan). Jpn. Kokai Tokkyo Koho JP 06118587 A2 19940428 Heisei, 67 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1992-288153 19921005.

GΙ

AB In the title **photog.** material comprising .gtoreq.1 photosensitive **Ag halide** emulsion layer on a support, .gtoreq.50% of projected area is caused by tabular **Ag halide** grains with the aspect ratio of .gtoreq.2 and with dislocations, and .gtoreq.1 of hydrophilic colloidal layer contains .gtoreq.1 cyan coupler, I or II [Za = NH, CH(R13); Zb, Zc = C(R14):, N:; R11-13 = electron-accepting group; R14, R21 = H, substituent; R22 = substituent; Z2 = nonmetallic group forming N-contg. 6-membered group; X1,2 = H, coupling-off group released upon reaction with oxidized arom. primary amine developing agent].

IT 156042-99-8

(cyan coupler; hydrophilic colloidal layers of photog.

materials)

RN 156042-99-8 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, 6-cyano-2-(4-methoxyphenyl)-5-[(pentafluorophenyl)thio]-, 2,4-bis(1,1-dimethylpropyl)phenyl ester (9CI) (CA INDEX NAME)

IC ICM G03C007-38 ICS G03C001-035

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

ST silver halide color photog material; cyan coupler color photog material

IT Photographic emulsions

(color, hydrophilic colloidal layers of **photog**. materials)

IT Photographic couplers

(cyan, hydrophilic colloidal layers of photog. materials)

IT 151645-19-1 154105-16-5 155926-20-8 **156042-99-8** 156262-24-7 159082-05-0 159922-70-0 159922-71-

262-24-7 159082-05-0 159922-70-0 159922-71-1 (cyan coupler; hydrophilic colloidal layers of **photog.** materials)

IT 156233-85-1

(cyan coupler; silver halide color photog. material)

IT 151645-01-1P

(cyan coupler; silver halide color photog. material)

IT 159922-69-7

(cyan coupler; silver halide color photog. material with high sensitivity and pressure resistance)

IT 54153-51-4

(silver halide color photog.

material)

IT 150172-54-6P

(silver halide color photog.

material)

L65 ANSWER 13 OF 21 HCA COPYRIGHT 2005 ACS on STN

121:289503 Silver halide color photographic

materials with excellent color reproducibility. Obayashi, Keiji; Kawagishi, Toshio; Shimada, Yasuhiro (Fuji Photo Film Co Ltd, Japan). Jpn. Kokai Tokkyo Koho JP 06067385 A2 19940311 Heisei, 110 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1992-236333 19920813.

GI

$$R^{11}$$
 R^{12}
 R^{21}
 R^{22}
 X^{1}
 X^{2}
 X^{2}

AB In the title photog. materials having a red-sensitive
Ag halide emulsion layer contg. a cyan coupler, a
green-sensitive Ag halide emulsion layer contg.
a magenta coupler, and a blue-sensitive Ag halide
emulsion layer contg. a yellow coupler on a support, .gtoreq.1 of
said Ag halide emulsion layers contains a cyan
coupler represented by I and II, and the photog. materials
contain a compd., A-X [A = group releasing X upon reaction with
oxidized developing agent and simultaneously forming a compd. sol.
in a processing soln. or forming a color erasing compd.; X =
precursor residue of developing inhibitor], releasing a precursor of
a development inhibitor.

IT 156042-99-8

(cyan coupler; silver halide color
photog. materials with excellent color reproducibility)

RN 156042-99-8 HCA
CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid,
6-cyano-2-(4-methoxyphenyl)-5-[(pentafluorophenyl)thio]-,
2,4-bis(1,1-dimethylpropyl)phenyl ester (9CI) (CA INDEX NAME)

Me

Me

Me

Me

Me

Me

Me

Et-C

Me

IC ICM G03C007-38 ICS G03C001-83; G03C007-305

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

ST cyan coupler color photog material; silver halide color photog material

IT Photographic emulsions

(color, silver halide photog.

materials with excellent color reproducibility)

IT Photographic couplers

(cyan, silver halide color photog.

materials with excellent color reproducibility)

IT 144266-85-3 151645-02-2 151645-05-5 152828-30-3 154105-16-5

154105-22-3 154105-26-7 **156042-99-8** 157886-04-9

158035-35-9 158894-70-3 158894-71-4 158894-72-5 158894-73-6

(cyan coupler; silver halide color

photog. materials with excellent color reproducibility)

IT 146822-29-9P 150172-54-6P 151019-65-7P 151019-75-9P 151019-76-0P

(cyan coupler; silver halide color

photog. materials with excellent color reproducibility)

IT 106361-15-3 115716-62-6 157187-88-7 157187-89-8 157187-91-2 157187-93-4 157187-96-7 157187-97-8 157187-99-0 157188-00-6 157232-61-6 157232-62-7

(silver halide color photog.

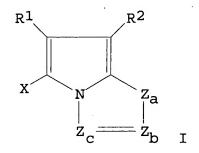
material with excellent color reproducibility)

L65 ANSWER 14 OF 21 HCA COPYRIGHT 2005 ACS on STN

121:289475 Silver halide color photographic

material and its processing. Obayashi, Keiji; Shimada, Yasuhiro (Fuji Photo Film Co Ltd, Japan). Jpn. Kokai Tokkyo Koho JP 06003784 A2 19940114 Heisei, 62 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1992-185770 19920622.

GΙ



AB In the title full color photog. material, the dry film thickness of whose whole hydrophilic colloid layer on exposing side of its support is .ltoreq.22 .mu.m, .gtoreq.1 pyrrolo azole cyan coupler I (Za = NH, CHR3; Zb, Zc = CR4, N; R1-3 = electron attractive group of Hammett's .sigma.p value .gtoreq.0.20; the .sigma.p sum of R1 and R2 is .gtoreg.0.65; R4 = H, substituent; multi R4 may be same or different; X = group releasable on reaction with an oxidized developer; when R1-4 or X is a divalent group, the mol. can be polymer) is contained. The processing of the photog. material includes color developing with an arom. primary amine developer, desilvering, rinsing and (or) stabilizing, wherein the color developing is carried out in less than 150 s. photog. material shows superior coloring property, fastness, color reproducibility, processing stability and esp. desilvering property.

IT 156042-99-8P

(prepn. and use of, as cyan coupler, color **photog.** material using)

RN 156042-99-8 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid,

6-cyano-2-(4-methoxyphenyl)-5-[(pentafluorophenyl)thio]-, 2,4-bis(1,1-dimethylpropyl)phenyl ester (9CI) (CA INDEX NAME)

G03C007-38

158035-32-6P

IC

ICM

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ICS
          G03C007-26; G03C007-407
     74-2 (Radiation Chemistry, Photochemistry, and
CC
     Photographic and Other Reprographic Processes)
     Section cross-reference(s): 41
ST
    photog material pyrroloazole cyan coupler
IT
     Photographic processing
        (rapid)
IT
     Photographic films
        (color, contg. pyrroloazole cyan coupler)
IT
     Photographic couplers
        (cyan, pyrroloazole)
IT
     152828-30-3
                   154021-48-4
                                  154021-49-5
                                                 154021-50-8
                                                               155926-16-2
     158035-28-0
                   158035-29-1
                                  158035-30-4
        (cyan coupler, color photog. material using)
IT
     146822-29-9P
                    151019-75-9P
                                    151019-76-0P
        (prepn. and reaction of, cyan coupler from, for photog.
        material)
IT
     151019-65-7P
                    152828-32-5P
                                    153004-06-9P
                                                   154021-52-0P
     154021-57-5P
                    154021-60-0P
                                    154021-61-1P
                                                    154021-62-2P
     154021-64-4P
                    155926-17-3P 156042-99-8P
                                                 158035-31-5P
```

(prepn. and use of, as cyan coupler, color photog.

158035-34-8P

158035-33-7P

material using)

IT 2425-77-6 2905-62-6, 3,5-Dichloro benzoyl chloride 154021-47-3 (reaction of, cyan coupler from, for **photog.** material)

L65 ANSWER 15 OF 21 HCA COPYRIGHT 2005 ACS on STN

121:267613 Silver halide color photographic

material. Ootani, Shigeaki (Fuji Photo Film Co Ltd, Japan). Jpn. Kokai Tokkyo Koho JP 05333500 A2 19931217 Heisei, 107 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1992-165481 19920602.

GΙ

$$\begin{array}{c|cccc}
R^1 & R^2 \\
X & X & Za \\
 & Zc = Zb & I
\end{array}$$

AB In the title full color photog. material having .gtoreq.1 each color sensitive Ag halide emulsion layer, .gtoreq.1 of the cyan coloring layer(s) contains .gtoreq.1 pyrrolo azole cyan coupler I (Za = NH, CHR3; Zb, Zc = CR4, N; R1-3 = electron attractive group of Hammett's .sigma.p value .gtoreq.0.20; the .sigma.p sum of R1 and R2 is .gtoreq.0.65; R4 = H, substituent; multi R4 may be same or different; X = group releasable on reaction with an oxidized developer; when R1-4 or X is a divalent group, the mol. can be a polymer), and AgCl 95 mol%-contg.

AgCl(Br) or AgCl emulsion particles spectrally sensitized by .gtoreq.1 sensitizing dye of redn. potential equal or smaller than -1.27V(vs SCE). The photog. material can be rapid processed with improved sensitivity change.

IT 156042-99-8

(cyan coupler, photog. material using)

RN 156042-99-8 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, 6-cyano-2-(4-methoxyphenyl)-5-[(pentafluorophenyl)thio]-, 2,4-bis(1,1-dimethylpropyl)phenyl ester (9CI) (CA INDEX NAME)

154021-47-3

G03C007~38

IC

ΙT

2425-77-6

ICM

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ICS
          G03C001-035; G03C001-12; G03C001-20
CC
     74-2 (Radiation Chemistry, Photochemistry, and
     Photographic and Other Reprographic Processes)
     Section cross-reference(s): 41
ST
     photog material pyrrolo azole cyan coupler; sensitizing
     dye photog material
IT
     Photographic paper
        (contg. pyrrolo azole cyan coupler and high content
        silver chloride)
IT
     Photographic sensitizers
        (redn. potential specified)
IT
     Photographic couplers
        (cyan, pyrrolo azole)
     152828-30-3
IT
                   152828-31-4
                                  154021-52-0
                                                154021-53-1
                                                               154021-59-7
     154021-60-0
                   155926-12-8 156042-99-8
                                              158035-35-9
     158320-34-4
                   158320-35-5
                                  158320-36-6
                                                158320-37-7
                                                               158320-38-8
     158320-39-9
                   158320-40-2
                                  158320-41-3
                                                158825-81-1
        (cyan coupler, photog. material using)
IT
                    151019-75-9P
                                    151019-76-0P
        (prepn. and reaction of, cyan coupler from, for photog.
        material)
IT
     151019-65-7P
        (prepn. of, as cyan coupler, for photog. material)
```

2905-62-6, 3,5-Dichloro benzoyl chloride

(reaction of, cyan coupler from, for photog. material) IT 20185-07-3 27934-51-6 63737-55-3 99131-52-9 100780-71-0 100834-87-5 117633-60-0 119056-67-6 122341-62-2 144675-43-4 146486-82-0 146486-83-1 155329-65-0 158320-42-4 158320-43-5 158320-44-6 158320-46-8 158320-48-0 158320-49-1 (sensitizing dye, photog. material using)

L65 ANSWER 16 OF 21 HCA COPYRIGHT 2005 ACS on STN 121:241587 silver halide color photographic material. Obayashi, Keiji; Shimada, Yasuhiro (Fu

material. Obayashi, Keiji; Shimada, Yasuhiro (Fuji Photo Film Co Ltd, Japan). Jpn. Kokai Tokkyo Koho JP 06019090 A2 19940128 Heisei, 89 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1992-195877 19920701.

GI

$$R^{1}$$
 X
 X
 X
 X
 Z^{1}
 Z^{3}
 Z^{2}
 Z^{2}
 Z^{2}
 Z^{3}
 Z^{2}
 Z^{3}
 Z^{2}
 Z^{3}
 Z^{2}
 Z^{3}
 Z^{3

AB A silver halide color photog. material showing good color formation and providing color images with improved fastness using a color developer with reduced replenishment comprises, on a support, .gtoreq.1 silver halide emulsion layer contg. a cyan coupler represented by the formula I (Z1 = NH or CHR3; Z2, Z3 = CR4 or N; R1, R2, R3 = an electron-accepting group having a Hammet's substituent const. .sigma.p of .gtoreq.0.20 with the sum of the .sigma.p values for R2 and R3 being .gtoreq.0.65; R4 = H or a substituent group; X = H or a group releasable upon reaction with an oxidized arom. primary amine developer) and a coupler represented by the formula II (R1 = CONR4R5, SO2NR4R5, NHCOR4, NHCO2R6, NHSO2R6, NHCONR4R5, or NHSO2NR4R5; R2 = a substituent group; R3 = H or a group releasable

upon reaction with an oxidized arom. primary amine developer; R4, R5 = H, alkyl, aryl, or heterocyclyl; R6 = alkyl, aryl, or heterocyclyl; k = an integer) or III (R1 = alkyl, aryl, or heterocyclyl; R2 = aryl; Z = H or a coupling-off group).

IT 158546-42-0

(photog. coupler)

RN 158546-42-0 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, 5-[(4-carboxy-2,3,5,6-tetrachlorophenyl)thio]-6-cyano-2-[4-[[(diethylamino)carbonyl]amino]phenyl]-, 7-[2,4-bis(1,1,3,3tetramethylbutyl)phenyl] ester (9CI) (CA INDEX NAME)

IC ICM G03C007-38

ICS G03C007-34; G03C007-407

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

ST silver halide color photog material; naphthol deriv photog coupler; acetanilide deriv photog coupler

IT Photographic couplers

(acetanilide and naphthol derivs. as)

IT Photographic emulsions

(color, contg. acetanilide and naphthol derivs.)

IT 82684-62-6 90936-93-9 102604-67-1 103425-88-3 103576-30-3 111244-14-5 115625-86-0 128061-03-0 137558-58-8 137580-56-4 151019-65-7 152828-30-3 154021-48-4 154021-49-5 154021-52-0 154021-53-1 154021-58-6 154021-59-7 154021-60-0 154021-61-1 154021-62-2 154021-64-4 155926-13-9 155926-17-3 155926-18-4 156772-90-6 158035-28-0 158035-31-5 158035-32-6 158546-41-9 158546-42-0 158546-43-1 158546-44-2 158546-45-3 158546-46-4 158546-47-5 158546-48-6 158546-49-7 158546-50-0 158546-51-1 158546-52-2 158546-53-3 (photog. coupler) 2425-77-6 2905-62-6 146822-29-9 151019-75-9 151019-76-0 154021-47-3

IT

(photog. coupler prepn. using)

ANSWER 17 OF 21 HCA COPYRIGHT 2005 ACS on STN

121:241574 Silver halide color photographic

Nakagawa, Hajime; Shimada, Yasuhiro (Fuji photosensitive material. Photo Film Co Ltd, Japan). Jpn. Kokai Tokkyo Koho JP 05297538 A2 19931112 Heisei, 73 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1992-121080 19920416.

GI

AB The title material contains .qtoreq.1 kind(s) of cyan couplers I (Za = NH, CHR3; Zb, Zc = CR4, N; R1-3 = electron-withdrawing group having a Hammett's substituent const. .sigma.p >0.20; the sum of the .sigma.p values of R1 and R2 is >0.65; R4 = H, substrate, if there are >2 of R4 they may be the same or different; X = H, group to be eliminated upon coupling; R1-4 or X may become a divalent group and bond with a polymer which is larger than a dimer or a polymer chain to form a homopolymer or a copolymer) and .gtoreq.1 kind(s) of development inhibitor-releasing couplers A-{(L1)a-(B)m}p-(L2)n-DI [A = group which splits {(L1)a-(B)m}p-(L2)n-DI upon reaction with an oxidized arom. primary amine developing agent; L1 = group which splits the bond at its right side (the bond with (B)n) after breaking the bond at its left side; B = group which splits the bond at its right side upon reaction with an oxidized developing agent; L2 = group which splits the bond at its right side (the bond with

DI) after breaking the bond at its left side; DI = development inhibitor; a, m, n = 0, 1; p = 0-2, when p is plural (L1)a-(B)m may be the same or different]. The material shows good color reproducibility and superior shelf life.

IT 156042-99-8

(cyan photog. coupler, for good color reproducibility)

RN 156042-99-8 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, 6-cyano-2-(4-methoxyphenyl)-5-[(pentafluorophenyl)thio]-, 2,4-bis(1,1-dimethylpropyl)phenyl ester (9CI) (CA INDEX NAME)

IC ICM G03C007-38

ICS G03C007-305

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

ST silver color **photog** photosensitive material; cyan **photog** coupler; development inhibitor releasing **photog** coupler

IT Photographic development

(inhibitor-releasing compds. for)

IT Photographic films

(color, with good color reproducibility and shelf life)

IT **Photographic** couplers

(cyan, for good color reproducibility and shelf life)

IT **156042-99-8** 156772-91-7 158293-26-6 158293-27-7 (cyan **photog.** coupler, for good color reproducibility)

IT 72143-89-6 115750-54-4 125981-35-3 156343-05-4 158372-16-8 158372-17-9

(photog. development inhibitor-releasing coupler)

IT 146822-29-9P 151019-75-9P

(prepn. and reaction of, for cyan photog. coupler)

IT 151019-65-7P

(prepn. and use of, as cyan **photog**. coupler for good color reproducibility)

L65 ANSWER 18 OF 21 HCA COPYRIGHT 2005 ACS on STN

121:191120 silver halide color photographic

material. Kobayashi, Hidetoshi (Fuji Photo Film Co Ltd, Japan). Jpn. Kokai Tokkyo Koho JP 05341467 A2 19931224 Heisei, 65 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1992-175064 19920610.

GI

AB A silver halide color photog. material
with high sensitivity and suppressed fog after imagewise exposure comprises .gtoreq.1 silver halide emulsion layer contg. Se-sensitized silver halide grains and .gtoreq.1 cyan coupler represented by the formula I or II (Za = NH or CHR5; Zb, Zc = N or CR6; R1, R2, R5 = an electron-attracting group having a Hammett's substituent const. (.sigma.p) .gtoreq.0.2 with the sum of .sigma.p for R1 and R2 being .gtoreq.0.65; R3, R6 = H or a substituent group; R4 = a substituent group; Zd = a nonmetallic group for forming a 6-membered heterocyclic ring contg. .gtoreq.1 dissocg. group; X1, x2 = H or a group releasable upon reaction with an oxidized arom. primary amine developing agent).

IT 156042-99-8

(cyan **photog**. coupler, for forming dye **images** with suppressed fog formation)

RN 156042-99-8 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid,

6-cyano-2-(4-methoxyphenyl)-5-[(pentafluorophenyl)thio]-, 2,4-bis(1,1-dimethylpropyl)phenyl ester (9CI) (CA INDEX NAME)

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IC ICM G03C007-38
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ICS G03C001-09

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

ST silver halide color photog material; pyrroloazole cyan photog coupler

IT Photographic emulsions

(selenium-sensitized, contq. pyrroloazoles)

IT Photographic couplers

(cyan, pyrroloazoles as, for forming dye **images** with suppressed fog formation)

IT 2651-89-0 3878-44-2 5117-16-8 5943-53-3 10061-88-8

140198-95-4 146922-05-6 157886-05-0 157886-06-1

(chem. sensitizer, for silver halide

photog. material)

IT 144266-85-3 151019-65-7 151645-00-0 151645-01-1 151645-05-5 151645-11-3 155494-47-6 155926-12-8 155926-16-2 155926-20-8 156042-99-8 156233-84-0 156262-24-7 156772-90-6 157516-74-0 157516-78-4 157886-01-6 157886-02-7 157886-03-8 157886-04-9

(cyan photog. coupler, for forming dye images with suppressed fog formation)

IT 146822-29-9P 150172-54-6P 151019-75-9P 151019-76-0P

(prepn. and reaction of, in prepg. cyan photog. coupler)

IT 2425-77-6 2905-62-6 3044-06-2 54153-51-4 154021-47-3 (reaction of, in prepg. cyan **photog.** coupler)

L65 ANSWER 19 OF 21 HCA COPYRIGHT 2005 ACS on STN

121:46492 Silver halide color photographic

light-sensitive material. Yoshioka, Yasuhiro (Fuji Photo Film Co., Ltd., Japan). Eur. Pat. Appl. EP 569979 Al 19931118, 84 pp. DESIGNATED STATES: R: DE, FR, GB, NL. (English). CODEN: EPXXDW. APPLICATION: EP 1993-107800 19930513. PRIORITY: JP 1992-146741 19920514.

AB A silver halide color photog.

light-sensitive material contains a specific pyrroloazole-type cyan coupler and a high-boiling org. solvent selected from phosphoric esters, phosphonic esters, phosphinic esters, and phosphine oxide in a cyan dye-forming silver halide emulsion layer formed on a support.

IT 156042-99-8

(cyan photog. coupler, high-boiling solvents for)

RN 156042-99-8 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, 6-cyano-2-(4-methoxyphenyl)-5-[(pentafluorophenyl)thio]-, 2,4-bis(1,1-dimethylpropyl)phenyl ester (9CI) (CA INDEX NAME)

```
CC
     74-2 (Radiation Chemistry, Photochemistry, and
     Photographic and Other Reprographic Processes)
     pyrroloazole cyan photog coupler; silver
ST
     halide color photog material; org solvent high
     boiling photog
     Photographic emulsions
IT
        (color, contg. pyrroloazole-type cyan dye formers and
       high-boiling solvents)
ΙT
     Photographic couplers
        (cyan, pyrroloazoles, high-boiling solvents for)
IT
     152828-31-4
                  152828-32-5 152828-33-6
                                              153004-06-9
                                                             154021-51-9
                   154021-53-1
                                154021-60-0 156042-99-8
     154021-52-0
        (cyan photog. coupler, high-boiling solvents for)
                   151019-75-9P
IT
     146822-29-9P
                                  151019-76-0P
        (prepn. and reaction of, in prepg. cyan photog.
        coupler)
IT
     151019-65-7P
        (prepn. of, as cyan photog. coupler)
                2905-62-6
                            154021-47-3
IT
     2425-77-6
        (reaction of, in prepg. cyan photog. coupler)
     78-50-2 1330-78-5, Tris(methylphenyl) phosphate
                                                        1754-47-8
IT
     2528-39-4, Trihexyl phosphate 2785-32-2 3151-39-1
                                                            26967-76-0.
     Tris(isopropylphenyl) phosphate
                                      52994-10-2
                                                   93082-05-4
     137321-96-1 156043-00-4
                                156128-23-3
        (solvent, for pyrroloazole cyan photog couplers)
    ANSWER 20 OF 21 HCA COPYRIGHT 2005 ACS on STN
120:148841 Silver halide color photographic
               Takahashi, Osamu; Ohki, Nobutaka (Fuji Photo Film Co.,
    material.
    Ltd., Japan). Eur. Pat. Appl. EP 573008 A1 19931208, 70
    pp. DESIGNATED STATES: R: DE, FR, GB, NL. (English).
    EPXXDW. APPLICATION: EP 1993-108868 19930602. PRIORITY: JP
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1992-165482 19920602.

GI

$$R^{1}$$
 R^{2}
 R^{2}
 R^{2}
 R^{2}
 R^{2}
 R^{3}
 R^{2}
 R^{5}
 R^{6}
 R^{6

AB A Ag halide color photog. material has

on a support the combination of a pyrroloazole type cyan coupler I and .gtoreq.1 redox compd. from II, III, and IV having a mol. wt. of at least 350 [Z1 = NH, CH(R3); Z2, Z3 = C(R4):, N; R1-R3 = electron withdrawing group having a Hammett's substituent const. (.sigma.) .gtoreq.0.2 provided that the sum of .sigma. values for R1 and R2 is .gtoreq.0.65; R4 = H, substituent; X = H, split off group; R1-R4, X may be a divalent group to form a dimer or polymer of the coupler; R5, R6, R9 = monovalent group; j = 1-6; i = 1-4; k = 2, 3; Q = a naphthalene ring may form together with the benzene ring; A = CO, SO2; R7, R8 = alkyl, aryl, heterocyclyl, amino; m, n = 0-2; m + n = 1-2; p = 2-6; some restrictions on the no. of substituents may applyl. The material provides color photographs having faithfully reproduced colors which are highly fast to light under both high and low humidity conditions.

IT 153004-07-0

(as **photog**. cyan coupler)

RN 153004-07-0 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, 6-cyano-2-(4-methoxyphenyl)-5-[(pentachlorophenyl)thio]-, 2,4-bis(1,1-dimethylpropyl)phenyl ester (9CI) (CA INDEX NAME)

IC ICM G03C007-30

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 41

ST **photog** coupler cyan pyrroloazole; redox compd color reprodn paper

IT Photographic paper

(color, with improved reprodn.)

IT Photographic couplers

(cyan, pyrroloazole)

IT 152828-31-4 153004-06-9 **153004-07-0**

(as **photog**. cyan coupler)

IT 146822-29-9P 151019-75-9P 151019-76-0P

(prepn. and reaction of, photog. cyan coupler from)

IT 151019-65-7P

(prepn. and use of, as photog. cyan coupler)

IT 40292-87-3 72044-21-4 75467-58-2 87667-24-1 89131-34-0

95994-30-2 96048-53-2 153099-29-7 153099-30-0

(redox compd. for improved color reprodn. in **photog.** paper)

L65 ANSWER 21 OF 21 HCA COPYRIGHT 2005 ACS on STN

109:219501 Color photographic material for rapid processing. Takada, Shun; Onodera, Kaoru (Konica Co., Japan). Jpn. Kokai Tokkyo Koho JP 63100457 A2 19880502 Showa, 50 pp. (Japanese). CODEN:

JKXXAF. APPLICATION: JP 1986-254255 19861025. PRIORITY: JP 1986-135150 19860611.

GI For diagram(s), see printed CA Issue.

AB The title color photog. material contains a yellow coupler with relative coupling speed ratio (RM-RN) .gtoreq.05 in its yellow image forming layer, a magenta coupler selected from (I), (II), and (III) [Za, Zb, Zc =nonmetallic elements required to complete a N heterocycle; Xa, Xb, Xc = H, group releasable on reacting with the oxidized form of a color developer; Ra-q = H, other substituent, group not releasable during reaction of II with the oxidized form of a developer; Y1 = C, N; Y2 = C, heteroatom; - = single or double bond] as their polymers in the magenta image-forming layer, and a cyan coupler (IV) [R1 = alkyl, aryl, cycloalkyl, heterocyclyl; R2 = alkyl, aryl; R3 = H, halo, alkyl, alkoxy; Z1 = H, group releasable on reacting with the oxidized form of a primary arom. amine color developer] in the cyan image-forming layer, the Ag halide in each emulsion layer contg. AgCl .gtoreq.80 mol %. High color d. is achieved with little or no PhCH2OH in the developer soln.

IT 114173-42-1 117541-49-8

(magenta photog. coupler, for rapid processing films using benzyl alc.-free development)

RN 114173-42-1 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-5-carboxamide, N-[5-[[4-[2,4-bis(1,1-dimethylpropyl)phenoxy]-1-oxobutyl]amino]-2-chlorophenyl]-7-chloro-6-(1,1-dimethylethyl)-2-methyl- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} \text{Me} & \\ \text{Et-C} & \\ \text{Me} & \\ \text{C-Me} & \\ \text{Me} & \\ \text{C-NH} & \\ \text{C$$

CN Hexanamide, 2-[2,5-bis(1,1-dimethylpropyl)phenoxy]-N-[4-(3-chloro-5-cyano-7-methyl-1H-pyrrolo[1,2-a]imidazol-6-yl)phenyl]- (9CI) (CA INDEX NAME)

IC ICM G03C007-36

ICS G03C007-34; G03C007-38

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

IT **114173-42-1** 114173-43-2 114173-44-3 114173-45-4

114173-46-5 114190-91-9 **117541-49-8**

(magenta photog. coupler, for rapid processing films using benzyl alc.-free development)

=> d 166 1-39 cbib abs hitstr hitind

L66 ANSWER 1 OF 39 HCA COPYRIGHT 2005 ACS on STN

135:310817 Imaging material and imaging method.

Kondo, Katsuji; Tanaka, Shigeo (Konica Co., Japan). Jpn. Kokai

Tokkyo Koho JP 2001281820 A2 20011010, 33 pp. (Japanese).

CODEN: JKXXAF. APPLICATION: JP 2000-100674 20000403.

GΙ

$$V^{1}$$
 V^{2}
 V^{1}
 V^{2}
 V^{1}
 V^{2}
 V^{2}
 V^{1}
 V^{2}
 V^{2

AB The invention refers to an imaging material comprising a Ag halide emulsion with > 90% silver chloride on a substrate contg. I and Z11R11CH: [CR13CH:]nZ12R12 .cntdot.(X-)m [R1,2 = electron withdrawing group with Hammett .sigma.p > 0.2 wherein the sum of .sigma.p of R1 and R2 > 0.65; Z1 = non-metallic atoms needed to form a (un)substituted N-contg. 5 membered ring; X1 = H or group desorbed during the coupling reaction with a luminescent developing agent and oxidizer; Z11,12 = benzothiazole or naphthothiazol; R11,22 = alkyl, alkenyl or aryl; R12 = H, alkyl or aryl; n = 0 or 1; X- = anion; m = 0 or 1].

IT 7783-90-6, Silver chloride, uses
153004-06-9

(**image** formation ingredient and **image** formation method)

RN 7783-90-6 HCA

CN Silver chloride (AgCl) (9CI) (CA INDEX NAME)

Ag-Cl

RN 153004-06-9 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, 6-cyano-5-[[2-(ethoxycarbonyl)phenyl]thio]-2-[3-[[[4-[[(2-hexyldecyl)oxy]carbonyl]phenyl]sulfonyl]amino]-4-methoxyphenyl]-, 2-(diethylamino)-2-oxoethyl ester (9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 1-B

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- (CH<sub>2</sub>)<sub>7</sub>-Me
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IC ICM G03C007-38

ICS G03C001-035; G03C001-16; G03C001-18; G03C005-08; G03C007-44

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

ST photog imaging

IT Imaging

(**image** formation ingredient and **image** formation method)

IT 36290-04-7

(Demol N; image formation ingredient and image formation method)

IT 67-43-6 81-11-8D, deriv. 86-93-1, 1-Phenyl-5-mercaptotetrazole 90-43-7, o-Phenylphenol 102-71-6, Triethanol amine, uses 111-46-6, Diethylene glycol, uses 140-01-2, Sodium diethylene triamine pentaacetate 280-57-9, Triethylene diamine 471-34-1, Calcium carbonate, uses 577-11-7, Di(2-ethylhexyl) sulfosuccinate sodium salt 1323-19-9, Sodium tri-isopropylnaphthalene sulfonate 1345-25-1D, Iron(II) oxide, potassium hexacyano 2349-67-9,

2-Amino-5-mercapto-1,3,4-thiadiazole 2682-20-4 2736-18-7, Sodium 2,4-dichloro-6-hydroxy-s-triazine 2809-21-4 3710-84-7, N, N-Diethylhydroxyl amine 3846-71-7 4327-84-8 4622-66-6 5064-31-3 7487-88-9, Magnesium sulfate, uses 7664-41-7, Ammonia, 7681-49-4, Sodium fluoride, uses 7772-98-7, Sodium thiosulfate 7783-90-6, Silver chloride 7787-60-2, Bismuth chloride 7789-41-5, Calcium bromide 9003-39-8, Polyvinylpyrrolidone 10034-99-8, Magnesium sulfate 10043-52-4, Calcium chloride, uses heptahydrate 10196-04-0, Ammonium sulfite 10257-55-3, Calcium sulfite 10294-26-5, Silver sulfate 12030-49-8D, Iridium(IV) oxide, Potassium hexachloro 13453-07-1, Auric chloride 13463-67-7, Titania, uses 14070-48-5, 1-(3-Acetamidophenyl)-5-mercaptotetrazole 15182-68-0 23568-98-1 25295-51-6, Tinopal SFP 25973-55-1 26110-32-7 26172-55-4 26542-23-4 26761-40-0, Di(iso-decyl)phthalate 47867-58-3 60345-53-1, Tetrakis (vinylsulfonyl methyl) methane 52049-36-2 60350-71-2, 2,5-Di-sec-dodecylhydroguinone 68684-29-7 85238-64-8, 2,5-Di(1,1-dimethyl-4-hexyloxycarbonyl) butyl) 104497-94-1 110557-94-3 113477-02-4 120379-95-5 hydroguinone 124351-77-5 125598-17-6 142619-57-6, 2,5-Di-sec-tetradecyl hydroguinone 142776-95-2 146344-91-4, 2-sec-Dodecyl-5-sectetradecyl hydroquinone 150919-56-5 151019-65-7 152828-32-5 153004-06-9 154021-59-7 154021-66-6. 157533-14-7 158546-44-2 158907-87-0 160141-94-6 160141-97-9 188745-52-0 247578-70-7 366008-62-0 366015-31-8 (image formation ingredient and image formation method)

L66 ANSWER 2 OF 39 HCA COPYRIGHT 2005 ACS on STN

134:34994 Photographic lipophilic fine particle dispersion liquid, photographic material, and image formation. Hiyama, Kunimasa (Konica Co., Japan). Jpn. Kokai Tokkyo Koho JP 2000330239 A2 20001130, 66 pp. (Japanese).

CODEN: JKXXAF. APPLICATION: JP 1999-143205 19990524.

- * STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY AVAILABLE VIA OFFLINE PRINT *
- AB The title dispersion liq. contains a compd. I (R1, R2 = alkyl, aryl, alkoxy, aryloxy; R3 = H, halo, univalent org. group) or II [R1, R2 = substituent, .gtoreq.1 of R1 and R2 is alkoxy, aryloxy, alkylthio, acylamino, or NHCO2R (R = alkyl, aryl); X1, X2 = halo; m, n, p, q = 0-4, m + n, p + q = 0-4, m .noteq. n .noteq. 0, when m, n, p, q .gtoreq.2, the plural groups of R1, R2, X1, and X2 are the same or different] or .gtoreq.1 compd. (A) having an absorption max.

wavelength in the range of 330-390 nm and a molar extinction coeff. of .gtoreq.17000 and the av. particle diam. of the dispersed lipophilic fine particles is .ltoreq.0.1 .mu.m or the refractive index of the oil phase is 1.48-1.58. Photog. material, having .gtoreq.1 photosensitive layer and .gtoreq.1 nonphotosensitive layer, contains I, II, and (i) the compd. (A) and a nonionic surfactant, (ii) .gtoreq.1 selected from III (R 31 = C1-3 alkyl, R32 = ballast group; X21 = releasing group by reaction with developer oxide), IV, V, VI, and VII (R42 = substituent; R41, R43, R46-47 = H, substituent; Z1, Z3 = nonmetal atoms to form 5-membered N-contg. heterocycle; Z2, Z4 = nonmetal atoms to form 6-membered N-contg. heterocycle; R44-45 = electron withdrawing group; X31-34 = releasing group by reaction with developer oxide) (iii) aliph. alc., (iv) VIII (R12-13 = sec- or tert-alkyl), (v) tabular silver halide emulsion with AgCl content .gtoreq.95 mol% and aspect ratio .gtoreq.3.0, (vi) a fluorescent brightener in a support, (vii) Ag halide emulsion with AgCl content .gtoreq.95 mol% and contg. Ir compd., or (viii) fluorosurfactant. The photog. material contg. I or II is subjected to scanning exposure using laser beams having an emission max. at 400-450 nm to form images. The dispersion liq. shows high lightfastness and color d. even after storage and the photog. material provides high quality color images showing little variation of Dmin and discoloration upon rapid processing.

IT 153004-06-9

(coupler; photog. paper contg. UV absorbent)

RN 153004-06-9 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, 6-cyano-5-[[2-(ethoxycarbonyl)phenyl]thio]-2-[3-[[[4-[[(2-hexyldecyl)oxy]carbonyl]phenyl]sulfonyl]amino]-4-methoxyphenyl]-, 2-(diethylamino)-2-oxoethyl ester (9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 1-B

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IC
     ICM
         G03C001-815
     ICS
          G03C001-035; G03C001-09; G03C001-38; G03C005-08; G03C007-38;
          G03C007-392
     74-2 (Radiation Chemistry, Photochemistry, and
CC
     Photographic and Other Reprographic Processes)
     photog paper UV absorbent lipophilic dispersion; coupler
ST
     photog paper; surfactant photog paper
IT
     Photographic paper
     UV stabilizers
        (photog. paper manufd. by using lipophilic fine
        particle dispersion contg. UV absorbent)
IT
     99817-34-2
                  121343-15-5 153004-06-9
                                           158546-44-2
     172972-51-9
                   221387-60-6
        (coupler; photog. paper contg. UV absorbent)
IT
     16920-56-2
     (photog. emulsion contg. iridium compd.)
IT
     4782-13-2
                 40292-91-9 148236-55-9
                                            148898-74-2
                                                          197251-57-3
        (photog. paper contg. UV absorbent)
IT
     593-47-5, 9-Octadecen-1-ol
                                  8007-43-0, Sorbitan sesquioleate
        (photog. paper contg. UV absorbent and aliph. alc.)
IT
     18249-20-2
        (surfactant; photog. paper contg. UV absorbent)
    ANSWER 3 OF 39 HCA COPYRIGHT 2005 ACS on STN
           Silver halide color photographic
131:279219
     material containing bisurethane or bisureido compound.
                                                             Mikoshiba,
     Takashi; Soejima, Susumu (Fuji Photo Film Co., Ltd., Japan).
     Kokai Tokkyo Koho JP 11271940 A2 19991008 Heisei, 69 pp.
     (Japanese). CODEN: JKXXAF. APPLICATION: JP 1998-71020 19980319.
GI
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- (CH₂)₇-Me

AB The title photog. material, possessing .gtoreq.1 Ag halide emulsion layer on a support, contains .gtoreq.1 a compd. m-X2CONR2C6H4NR1COX1 (R1, R2 = H, aliph. group, aryl; X1, X2 = OR4, NR5R6; R4-6 = H, aliph. group, aryl, R1, R5, and R6 are not alkyl at the same time). The material may contain .gtoreq.1 a compd. I (R1, R2, R4, X1, and X2 are the same as defined for the above formula, resp.; R3 = H, substituent; R5, R6 = H, aliph. group, aryl; n = 0-4; this compd. has no ability of reacting with an oxidized color developing agent to form a dye) and .gtoreg.1 a cyan coupler II [Za, Zb = :CR13, :N, either one is :N and the other :CR13; R11, R12 = electron-attracting group with Hammett's substituent const. .sigma.p .gtoreq.0.20, the sum of .sigma.p values of R11 and R12 is .gtoreq.0.65; R13 = H, substituent; X3 = H, group releasing upon coupling with an oxidized arom. primary amine developing agent, R11-13 and X3 may be divalent groups which link to a polymer higher than dimer or polymer chain to form a (co)polymer]. The material shows improved coloring properties and storage stability and provides a high color quality image with improved lightfastness and without cyan stain.

IT 143324-39-4

(silver halide color photog.

material contg. bisurethane or bisureido compd. and pyrolotriazole cyan coupler)

RN 143324-39-4 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-6-carboxylic acid,
5-[[2-butoxy-5-(1,1,3,3-tetramethylbutyl)phenyl]thio]-7-cyano-2-[3[[[5-[[[5-octyl-2-(octyloxy)phenyl]sulfonyl]amino]-2(octyloxy)phenyl]sulfonyl]amino]phenyl]-, methyl ester (9CI) (CA
INDEX NAME)

IC ICM G03C007-392

ICS G03C007-38

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

ST silver halide photog bisurethane bisureido; pyrolotriazole cyan coupler silver halide photog

IT Photographic emulsions

(color; silver halide color photog. material contg. bisurethane or bisureido compd. and pyrolotriazole cyan coupler)

IT Cyan couplers

(silver halide color photog.

material contg. bisurethane or bisureido compd. and pyrolotriazole cyan coupler)

IT 126360-49-4 223564-71-4 245439-71-8 245439-72-9 245439-73-0 245439-74-1 245439-75-2 245439-76-3 245439-78-5 245439-79-6 245439-80-9 245439-81-0 245439-82-1 245439-83-2 245439-84-3 245439-85-4 245439-86-5 245439-87-6 245439-88-7 245439-90-1 245439-91-2 245439-92-3 245439-93-4 245439-94-5 245439-95-6 245439-96-7 245439-97-8 245439-98-9

(dispersion medium in coupler-contg. layer; silver

halide color photog. material contg.

bisurethane or bisureido compd. and pyrolotriazole cyan coupler)

${\tt IT}$	143324-39-4	151019-64-6	153273-52-0	178743-91-4	
	179330-29-1	184947-09-9	188745-52-0	200049-63-4	200049-64-5
	200110-89-0	200110-90-3	200110-91-4	200137-20-8	200137-21-9
	200137-23-1	200216-40-6	211051-73-9	211051-76-2	217456-51-4
	245439-99-0	245440-00-0	245440-02-2	245440-03-3	245440-04-4
	245440-05-5	245440-06-6	245440-45-3		

(silver halide color photog. material contg. bisurethane or bisureido compd. and pyrolotriazole cyan coupler)

L66 ANSWER 4 OF 39 HCA COPYRIGHT 2005 ACS on STN

131:235677 Phenidone compound and silver halide
color photographic paper containing the same. Mikoshiba,
Takashi; Yoshioka, Yasuhiro (Fuji Photo Film Co., Ltd., Japan).
Jpn. Kokai Tokkyo Koho JP 11246785 A2 19990914 Heisei, 55
pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1998-49809
19980302.

GI

O L-O-R1

HN
$$R^2$$
 R^8
 R^4
 R^5
 R^5
 R^6
 R^6

The Ag halide color photog. paper contains the phenidone compd. represented by a general formula I (L = alkylene; R1 = alkyl, aryl; R2, R3 = H, alkyl, aryl; R4-8 = H, substituent) and a cyan coupler represented by a general formula II (Za, Zb = -C(Rc):, -N:; Ra, Rb = electron withdrawing group having Hammett substituent const. .delta.p .gtoreq.0.20; Rc = H, substituent; X = H, coupling group). The photog. paper shows excellent color reprodn. and improved storage stability.

IT 143324-39-4

(cyan coupler in silver halide color photog. paper)

RN 143324-39-4 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-6-carboxylic acid,
5-[[2-butoxy-5-(1,1,3,3-tetramethylbutyl)phenyl]thio]-7-cyano-2-[3[[[5-[[[5-octyl-2-(octyloxy)phenyl]sulfonyl]amino]-2(octyloxy)phenyl]sulfonyl]amino]phenyl]-, methyl ester (9CI) (CA
INDEX NAME)

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IC ICM C09B057-00
ICS C07D231-08; C07D417-10; C07D487-04; G03C007-38; G03C007-392
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CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

ST phenidone silver halide color photog paper cyan coupler

IT Color **photographic** paper

Cyan couplers

(phenidone compd. and silver halide color

photog. paper contg. the same)

IT 143324-39-4 153273-52-0 184773-62-4 200049-62-3 200049-65-6 200110-90-3 200110-96-9 200137-21-9 200137-23-1 211051-73-9 211051-94-4 219553-72-7 220383-54-0 243986-78-9 243986-79-0 243986-80-3 243986-81-4 243986-82-5

(cyan coupler in silver halide color

photog. paper)

IT 184947-09-9P 188745-52-0P

(cyan coupler in silver halide color

photog. paper)

243986-55-2 IT 243986-56-3 243986-57-4 243986-58-5 243986-59-6 243986-60-9 243986-61-0 243986-62-1 243986-63-2 243986-64-3 243986-65-4 243986-66-5 243986-67-6 243986-68-7 243986-69-8 243986-70-1 243986-71-2 243986-72-3 243986-73-4

(phenidone compd. in silver halide color

photog. paper)

IT 243986-53-0P 243986-54-1P

(phenidone compd. in silver halide color

photog. paper)

IT 105-34-0, Methyl cyanoacetate 7726-95-6, Bromine, reactions 15159-40-7, Morpholinocarbonyl chloride 25761-72-2,

Diallylcarbamoyl chloride 163119-16-2, 2,6-Di-tert-butyl-4-methylcyclohexanol 194419-32-4

(prepn. of cyan coupler for silver halide color photog. paper)

- IT 200111-47-3P 200111-48-4P 200111-49-5P 243986-83-6P (prepn. of cyan coupler for **silver halide** color **photog.** paper)
- IT 243986-74-5P 243986-75-6P 243986-76-7P (prepn. of phenidone compd. for silver halide color photog. paper)
- L66 ANSWER 5 OF 39 HCA COPYRIGHT 2005 ACS on STN
 131:80699 Photographic couplers having UV-absorbing function
 and silver halide photographic
 material using same. Nakamura, Kazuaki; Chen, Zuliu; Kita, Hiroshi;
 Kaneko, Yutaka (Konica Co., Japan). Jpn. Kokai Tokkyo Koho JP
 11160840 A2 19990618 Heisei, 68 pp. (Japanese). CODEN:
 JKXXAF. APPLICATION: JP 1997-340814 19971127.
- The title couplers have UV-absorbing function and molar absorption coeff. of .gtoreq.10,000 at 350 nm and .ltoreq.100 at 420 nm in MeOH.. Cyan, magenta, and yellow couplers with specified structures and above conditions are also claimed. A Ag halide photog. material contg. .gtoreq.1 of the above couplers is also claimed. The photog. material shows improved processability in rapid process and provides high quality color images with excellent lightfastness.
- RN 228416-09-9 HCA
- CN Propanoic acid, 3-[[3-[5-[[(4-dodecylphenyl)sulfonyl]amino]-2-hydroxyphenyl]-6,7-bis(trifluoromethyl)-1H-pyrrolo[2,1-c]-1,2,4-triazol-5-yl]thio]- (9CI) (CA INDEX NAME)

IC ICM G03C007-32

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

ST photog coupler UV absorbing; mol absorption coeff photog coupler; light fastness photog emulsion coupler; rapid processing photog coupler; cyan magenta yellow coupler

IT Cyan couplers

Magenta couplers

Photographic couplers

Photographic development

Photographic emulsions

UV stabilizers

Yellow couplers

(photog. coupler having UV-absorbing property and specified mol. absorption coeff. for emulsion for rapid processing)

IT Light-resistant materials

(photog. coupler having UV-absorbing property and specified mol. absorption coeff. for emulsion providing image with light fastness)

		_	-		
IT	228415-75-6	228415-76-7	228415-77-8	228415-78-9	228415-79-0
	228415-80-3	228415-81-4	228415-82-5	228415-83-6	228415-84-7
	228415-85-8	228415-86-9	228415-87-0	228415-88-1	228415-89-2
	228415-90-5	228415-91-6	228415-92-7	228415-93-8	228415-94-9
	228415-95-0	228415-96-1	228415-97-2	228415-98-3	228415-99-4
	228416-00-0	228416-01-1	228416-02-2	228416-03-3	228416-04-4
	228416-05-5	228416-06-6	228416-07-7	228416-08-8	
	228416-09-9	228416-10-2	228416-11-3	228416-12-4	
	228416-13-5	228416-14-6	228416-15-7	228416-16-8	228416-17-9
	228416-18-0	228416-19-1	228416-20-4	228416-21-5	228416-22-6
	228416-23-7	228416-24-8	228416-25-9	228416-26-0	228416-27-1
	228561-33-9				

(photog. coupler having UV-absorbing property and specified mol. absorption coeff. for emulsion providing image with light fastness)

L66 ANSWER 6 OF 39 HCA COPYRIGHT 2005 ACS on STN

130:88106 Silver halide color photographic

material. Ishii, Fumio; Daiba, Shinichi; Oshiyama, Tomohiro; Hirabayashi, Shigeto; Iwai, Yoshiko (Konica Corporation, Japan). Eur. Pat. Appl. EP 886179 Al 19981223, 142 pp. DESIGNATED STATES: R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO. (English). CODEN: EPXXDW. APPLICATION: EP 1998-111048 19980616. PRIORITY: JP 1997-158733 19970616; JP 1997-182358 19970708; JP 1997-214002 19970724; JP 1997-217563 19970812; JP 1997-222442 19970819.

AB A silver halide color photog. material comprises a thermotropic liq. crystal compd. represented by the formula Y1A1(X1)mA2Y2 or Y1A1(X1)mA2(X2)nA3Y2 (A1-3 = an alicyclic or arom. group; X1, X2 = a bonding group; m, n = 0 or 1; Y1, Y2 = a substituent group). The color photog. material is improved in lightfastness of dye images and dye-forming efficiency.

IT 150982-37-9

(cyan photog. coupler for use in color photog . materials contg. thermotropic liq. crystals)

RN 150982-37-9 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid,
2-[3-[[2-[2,4-bis(1,1-dimethylpropyl)phenoxy]-1oxobutyl]amino]phenyl]-5-[[2-butoxy-5-(1,1,3,3tetramethylbutyl)phenyl]thio]-6-cyano-, 1-methylethyl ester (9CI)
(CA INDEX NAME)

IC ICM G03C007-388 ICS G03C007-392

CC 74-2 (Radiation Chemistry, Photochemistry, and

Photographic and Other Reprographic Processes)

```
ST
     color photog emulsion thermotropic liq crystal
IT
     Photographic emulsions
        (color; contg. thermotropic lig. crystals)
IT
     Magenta couplers
        (pyrazoloazoles for color photog. materials contg.
        thermotropic liq. crystals)
IT
     Liquid crystals
        (thermotropic; silver halide color
        photog. materials contq.)
IT
     218767-62-5
        (agenta photog. coupler for use in color photog
        . materials contg. thermotropic liq. crystals)
·IT
     107141-93-5
                   115625-86-0 150982-37-9
                                             151019-65-7
                   161255-64-7
     161255-60-3
                               161255-77-2
                                               174215-57-7
                                                            175734-04-0
     196965-46-5
                   207303-08-0
                                 218767-83-0
                                               218767-87-4 218786-85-7
        (cyan photog. coupler for use in color photog
        . materials contq. thermotropic liq. crystals)
IT
     218767-69-2
        (magenta photog. coupler for use in color
        photog. materials contg. thermotropic liq. crystals)
IT
     910-31-6
                25822-54-2
                             38690-76-5
                                          62439-34-3
                                                       65201-68-5
     65718-56-1
                  70351-85-8
                               77363-09-8
                                            78904-19-5
                                                         80274-66-4
     81455-18-7
                  81843-52-9
                               95480-29-8
                                            99217-29-5
                                                          123560-54-3
     218768-26-4
                   218768-29-7
                                 218768-32-2
                                               218768-41-3
                                                              218768-44-6
     218768-50-4
                   218768-52-6
                                 218768-54-8
                                               218768-55-9
                                                              218768-56-0
     218768-57-1
                   218768-59-3
                                 218768-51-7
                                               218768-63-9
                                                             218768-65-1
     218768-69-5
                   218768-70-8
        (thermotropic liq. crystal for silver halide
        color photog. materials)
    ANSWER 7 OF 39 HCA
                          COPYRIGHT 2005 ACS on STN
L66
           Silver halide color photographic
129:168037
     material, phenidone compounds used therefor, and process for
    preparing the same.
                         Mikoshiba, Hisashi; Yoshioka, Yasuhiro;
     Soejima, Shin; Takahashi, Osamu; Saito, Naoki; Morigaki, Masakazu
     (Fuji Photo Film Co., Ltd., Japan). PCT Int. Appl. WO 9833760 A1
     19980806, 162 pp. DESIGNATED STATES: W: CN, JP, US; RW:
    AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE.
     (Japanese). CODEN: PIXXD2. APPLICATION: WO 1998-JP432 19980202.
```

PRIORITY: JP 1997-20816 19970203; JP 1997-140719 19970529; JP

1997-195881 19970722.

AB Claimed is a silver halide color photog

. material improved in the fastness of a color image, color reprodn., cyan stain, cyan color mixing at the time of processing, and the like by the combined use of a phenidone compd. having a particular structure, such as one represented by general formula (I; R4 = H, C1-30 alkyl, C6-20 aryl; R2a = C1-30 alkyl or alkenyl; R5 - R9 = H, alkyl, aryl, alkoxy, aryloxy, NH2, alkylamino, arylamino, acylamino, aminocarbonylamino, alkoxycarbonylamino, arylcarbonylamino, alkoxycarbonyl, aryloxycarbonyl, sulfonyl, sulfonylamino, halo, OH, CO2H, heterocyclyl, SO2NH2, CONH2, azo, alkylthio, arylthio, imido, sulfinyl, phosphonyl, acyl) and a pyrrolotriazole cyan coupler. The phenidone compds. I can be prepd. at a low cost on a com. scale by reacting an .alpha.-alkyl- or alkenylacrylic ester of formula R4HC:CR2aCO2R3 (R2a, R4 = same asabove) with a phenylhydrazine compd. represented by general formula ((II; R5 - R9 = same as above). Thus, a soln. of 74.04 mmol CH2:C(C16H33-n)CO2Me in toluene was dropwise to a stirred mixt. of 67.0 mmol phenylhydrazine and 73.7 mmol NaOMe at 100.degree. and the resulting mixt. was allowed to react at 100.degree. for 30 min to qive I (R2a = C16H33-n, R4 - R9 = H) (III). A color photog . paper contg. III, a cyan coupler (IV), a hindered amine (V) showed cyan stain .DELTA.D of 0.01, good color reprodn., and 91% photostability (residual ratio).

IT 211051-92-2

(silver halide color photog.

material contg. phenidone compds. and pyrrolotriazole cyan couplers)

RN 211051-92-2 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-6-carboxylic acid, 5-[[2-butoxy-5-(1,1-dimethyloctyl)phenyl]thio]-7-cyano-2-[3-[[[5-[[[5-octyl-2-(octyloxy)phenyl]sulfonyl]amino]-2-(octyloxy)phenyl]sulfonyl]amino]phenyl]-, methyl ester (9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 1-B

Me
$$\sim$$
 Me \sim C- (CH₂) 6 - Me \sim OBu-n

IC ICM C07C069-533

ICS C07D231-08; G03C007-392

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

ST color photog paper; Silver halide

color photog emulsion; fastness color image

improved; cyan stain color reprodn improved; pyrrolotriazole cyan coupler; phenidone compd prepn; phenylhydrazine cyclocondensation alkenylacrylic ester; alkylacrylic ester cyclocondensation phenylhydrazine

IT Cyan couplers

Photographic couplers

Photographic emulsions

Photographic paper

(silver halide color photog.

material contg. phenidone compds. and pyrrolotriazole cyan couplers)

IT 202483-63-4P 211051-27-3P 211051-31-9P 211051-36-4P 211051-40-0P 211051-44-4P 211051-47-7P 211051-49-9P

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211051-52-4P
               211051-54-6P
                              211051-57-9P
                                             211051-59-1P
211051-96-6P
               211051-97-7P
                              211051-99-9P
                                             211052-01-6P
211052-03-8P
               211052-05-0P
                              211052-07-2P
                                             211052-09-4P
               211052-13-0P
211052-11-8P
                              211052-15-2P
                                             211052-17-4P
211052-19-6P 211052-21-0P
                              211052-23-2P
                                             211052-25-4P
211052-27-6P
               211052-29-8P
                              211052-31-2P
                                             211052-32-3P
211052-35-6P
               211052-37-8P
                              211052-39-0P
                                             211052-41-4P
211052-43-6P
               232947-66-9P
                              361177-83-5P
                                             361177-92-6P
361181-22-8P
   (silver halide color photog.
   material contg. phenidone compds. and pyrrolotriazole cyan
   couplers)
2516-92-9
                                                      200216-42-8 .
            122586-52-1
                          122616-76-6
                                        158779-09-0
              200216-55-3
200216-44-0
                            200357-97-7
                                          211052-45-8
                                                        211052-47-0
211052-51-6
              211052-54-9
                            211052-58-3
                                          211052-60-7
                                                        211052-62-9
211052-64-1 211102-31-7
   (silver halide color photog.
   material contq. phenidone compds. and pyrrolotriazole cyan
   couplers)
153273-52-0
                            184773-62-4
              179330-29-1
                                          184947-09-9
                                                        188745-52-0
200049-63-4
              200049-65-6
                            200110-90-3
                                          200137-20-8
                                                        200137-21-9
200137-23-1
              211051-70-6
                            211051-73-9
                                          211051-76-2
                                                        211051-85-3
211051-92-2
              211051-94-4
   (silver halide color photog.
   material contg. phenidone compds. and pyrrolotriazole cyan
   couplers)
50-00-0, Formaldehyde, reactions
                                  95-92-1, Diethyl oxalate
100-63-0, Phenylhydrazine
                          108-59-8, Dimethyl malonate
                                                          112-61-8,
Methyl octadecanoate 112-82-3, 1-Bromohexadecane
                                                     553-90-2,
                   554-84-7, 3-Nitrophenol
Dimethyl oxalate
                                             628-97-7, Ethyl
hexadecanoate
                759-65-9
                          1590-53-0, 3-(n-
Hexadecyloxy) phenylhydrazine hydrochloride
                                             1806-72-0 23130-42-9,
Dimethyl n-hexadecylmalonate 53633-31-1, n-Hexadecylmalonic acid
monomethyl ester
                  211052-72-1, 3-(n-Hexadecyloxy) aniline
hydrochloride
   (silver halide color photog.
   material contg. phenidone compds. and pyrrolotriazole cyan
   couplers)
53633-32-2P
             123633-21-6P
                             211052-69-6P
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L66 ANSWER 8 OF 39 HCA COPYRIGHT 2005 ACS on STN

(silver halide color photog.

couplers)

IT

ΙT

IT

IT

129:101879 Photography and photographic film containing anti-diffusive coupler. Miyazawa, Kazuhiro; Tanaka, Shigeo (Konica Co., Japan). Jpn. Kokai Tokkyo Koho JP 10161287 A2 19980619 Heisei, 38 pp. (Japanese). CODEN: JKXXAF.

material contg. phenidone compds. and pyrrolotriazole cyan

APPLICATION: JP 1996-322650 19961203.

AB In the title material possessing .gtoreq.1 color image
-forming layer contg. photosensitive Ag halides
and couplers on a support, the Ag halide content
in the layer is .ltoreq.0.1 g/m2 (based on Ag) and the layer
contains an anti-diffusive coupler forming a transferable dye upon
coupling with an oxidized color developing agent. The coupler may
form a dye mol. with mol. wt 250-700 having no dissocg. group of pka
.ltoreq.12 or one with mol. wt. 450-1200 having .gtoreq.1 dissocg.
group of pka .ltoreq.12 upon coupling with an oxidized color
developing agent. An imaging method involving
amplification development of the material is also claimed. The
material prevents the deterioration of color reproducibility arising
from insufficient desilvering upon rapid processing in bleaching and
fixing steps after amplified development.

IT 209681-33-4

(photog. film contg. anti-diffusive coupler forming transferable dye)

RN 209681-33-4 HCA

CN Benzoic acid, 2-[[7-cyano-6-(heptafluoropropyl)-2-methyl-1H-pyrrolo[1,2-a]imidazol-5-yl]thio]-, 4-(1,1,3,3-tetramethylbutyl)phenyl ester (9CI) (CA INDEX NAME)

IC ICM G03C007-407

ICS G03C007-30; G03C007-32

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

ST photog antidiffusive coupler; transferable dye forming coupler photog

IT Photographic couplers

(photog. film contg. anti-diffusive coupler forming transferable dye)

IT 92974-52-2 209681-21-0 209681-22-1 209681-23-2 209681-24-3

209681-25-4 209681-27-6 209681-28-7 209681-29-8 209681-30-1 209681-31-2 209681-32-3 **209681-33-4** 209681-34-5 (**photog.** film contg. anti-diffusive coupler forming transferable dye)

L66 ANSWER 9 OF 39 HCA COPYRIGHT 2005 ACS on STN

128:277019 Silver halide color photographic
material containing a developing agent of sulfoaminophenol or
sulfonylhydrazine. Matsumoto, Kazuhiko; Nakamura, Takemare (Fuji
Photo Film Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 10078638 A2
19980324 Heisei, 74 pp. (Japanese). CODEN: JKXXAF.
APPLICATION: JP 1996-251017 19960902.

GI

OH R3 NHNHSO₂R5
$$R^2$$
 R^4 R^4 R^5 R^4 R^5 R^5 R^4 R^5 R^5 R^6 R^6

AΒ Claimed color photog. material contains a developing material I or II (R1-4 = H, alkyl, aryl, alkylcarboamide, arylcarbonamide, alkylsulfonamide, arylsulfonamide, alkylthio, arylthio, sulfamoyl, cyano, alkylsulfonyl, arylsulfonyl, alkylcarbonyloxy, arylcarbonyloxy, acyloxy; R5 = alkyl, aryl, heterocyclic group; Z = arom. or heterocyclic group), (2) a coupler releasing a cationic leaving group when reacted with the oxidized developing agent and (3) a coupler releasing a photog. useful compd. at a certain interval after the reaction with the oxidized developing agent. The photog. material is a thermal developing type without using a liq. developer soln., and provides color images with good color reprodn. quality, fine granularity and low stain d. Thus, developing agent I (R1 = Me; R2, R3 = H; R4 = dibutylamido; R5 = 2,4,6-tri-isopropylphenyl), bis (hexadecyl) meleinimido (coupler) and 1-phenyl-5-mercaptotetrazolereleasing coupler were incorporated in the dye diffusion transfer type thermal developing color photog. material.

IT 205386-45-4

RN CN (coupler; color photog. material contg.
 sulfoaminophenol or sulfonylhydrazine for thermal development)
205386-45-4 HCA
1H-Pyrrolo[2,1-c]-1,2,4-triazole-7-carboxylic acid,

3-[2-[[2-[2,4-bis(1,1-dimethylpropyl)phenoxy]-1-oxobutyl]amino]ethyl]-6-(phenylsulfonyl)-5-[(1-phenyl-1H-tetrazol-5-yl)thio]-, ethyl ester (9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 2-A

IC ICM G03C007-305

ICS G03C001-42; G03C007-00; G03C007-32; G03C007-392; G03C008-40

CC 74-2 (Radiation Chemistry, Photochemistry, and

Photographic and Other Reprographic Processes)

ST thermal development color photog material;
sulfoaminophenol developing agent photog material;
sulfohydrazide developing agent photog material; hetero
substituted hydrazine developing agent; maleimido coupler thermal
photog material; inhibitor releasing coupler photog
material

IT Photographic couplers

Photographic developers

(color **photog**. material contg. sulfoaminophenol or sulfonylhydrazine for thermal development)

IT Photographic couplers

(development-inhibitor-releasing; color photog.
material contg. sulfoaminophenol or sulfonvlhydrazine for

material contg. sulfoaminophenol or sulfonylhydrazine for thermal development)

IT Photographic films

(heat-developable; color photog. material contg.

sulfoaminophenol or sulfonylhydrazine for thermal development)

IT 146495-95-6 152828-26-7 188894-90-8 204077-03-2 205386-42-1

205386-43-2 205386-44-3 **205386-45-4** 205649-04-3 (coupler; color **photog**. material contg.

sulfoaminophenol or sulfonylhydrazine for thermal development)

IT 196105-81-4

(developer; color photog. material contg.

sulfoaminophenol or sulfonylhydrazine for thermal development)

L66 ANSWER 10 OF 39 HCA COPYRIGHT 2005 ACS on STN

125:208532 Thermally developable photographic material containing magenta coupler. Morita, Kensuke (Fuji Photo Film Co Ltd, Japan). Jpn. Kokai Tokkyo Koho JP 08166664 A2 19960625 Heisei, 40 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1994-309167 19941213.

GI

AB The material contains light-sensitive Ag halide grains, a coupler I or II [R11, R12 = electron-withdrawing group having Hammett's .sigma. const. .gtoreq.0.2 (sum of the consts.

.gtoreq.0.65); Z11 = NH, CHR13; Z12 = CR14, N; Z13 = CR15, N; R13 =
electron-withdrawing group having Hammett's .sigma. const.
.gtoreq.0.2; R14, R15 = H, substituent; X11, X21 = H, leaving group;
R21 = H, substituent; R22 = substituent; Z21 = nonmetal atom group
forming 6-membered N-contg. heterocycle], and a color developing
agent R1NHNHSO2R2 (R1 = arom. or arom. heterocyclic; R2 = alkyl,
aryl, heterocyclic, alkoxy, amino). The material gives color
photog. images with high sensitivity for short
heating time.

IT 181364-66-9

(thermally developable **photog**. material contg. magenta coupler)

RN 181364-66-9 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, 6-cyano-5-[[2-(1,1-dimethylethoxy)-4-(1,1,3,3tetramethylbutyl)phenyl]thio]-2-(1,1-dimethylethyl)-, 2,4-bis(1,1-dimethylpropyl)phenyl ester (9CI) (CA INDEX NAME)

IC ICM G03C008-40

ICS G03C008-40; G03C007-32; G03C008-36

CC 74-7 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

ST thermal development **photog** color material; photothermog copying magenta coupler pyrrole; sulfonyl hydrazine developer photothermog copying

IT Photothermographic copying

(thermally developable photog. material contg. magenta

coupler)

IT Photographic couplers

(magenta, pyrroles; thermally developable photog. material contg. magenta coupler)

IT 181364-69-2

(developing agent; thermally developable photog. material contg. magenta coupler)

IT 97991-66-7DP, derivs

(developing agent; thermally developable photog. material contq. magenta coupler)

IT 139152-09-3P 181364-70-5P

(in developing agent prepn. for thermally developable photog. material)

- IT 50-00-0, Formaldehyde, reactions 70-55-3, p-Toluenesulfonamide (in prepn. of magenta coupler for thermally developable photog. material)
- IT 151019-65-7 **181364-66-9** 181364-67-0 181364-68-1 (thermally developable **photog.** material contg. magenta coupler)
- IT 181364-65-8DP, terminating group 181364-71-6DP, arom. heterocyclic terminated

(thermally developable **photog**. material contg. magenta coupler)

IT 154021-52-0

(thermally developable **photog**. material contg. magenta coupler)

- L66 ANSWER 11 OF 39 HCA COPYRIGHT 2005 ACS on STN
- 125:154476 Thermally developable silver halide photosensitive material. Morita, Kensuke (Fuji Photo Film Co Ltd, Japan). Jpn. Kokai Tokkyo Koho JP 08122994 A2 19960517 Heisei, 40 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1994-279716 19941020.

GI

$$R^{11}$$
 R^{12}
 R^{21}
 R^{22}
 R^{21}
 R^{22}
 R^{21}
 R^{22}
 R^{21}
 R

$$R^1$$
 R^5 HO $NHSO_2R^4$ HO NH_2 R^3 III R^6 R^7 IV

The material contains a coupler I [R11, R12 = electron-drawing group with Hammett's .sigma.p const. .gtoreq.0.2 and total .gtoreq.0.65; Z11 = NH, CH(R13); Z12 = CR14, N; Z13 = CR15, N; R13 = electron-drawing group with Hammett's .sigma.p const. .gtoreq.0.2; R14, R15 = H, substituent; X11 = leaving group] and/or II (R21 = H, substituent; R22 = substituent; Z21 = nonmetallic group forming 5-6-membered heterocycle; X21 = leaving group) and a developing agent III (R1, R2, R3 = H, halo, alkyl, aryl, alkoxy, aryloxy, carbamoyl, sulfamoyl, alkyloxycarbonyl, aryloxycarbonyl, acylamino, sulfonamido, formyl, etc.; R4 = alkyl, aryl, heterocyclic, alkoxy, amino) and/or IV (R5, R6, R7 = R1, R2, R3). The material shows high-d. color image.

IT 180094-03-5P

(cyan coupler; thermally developable silver
halide photosensitive material)

RN 180094-03-5 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, 5-[[2-butoxy-5-(1,1,3,3-tetramethylbutyl)phenyl]thio]-6-cyano-2-(1,1-dimethylethyl)-, 2-butoxy-5-(1,1,3,3-tetramethylbutyl)phenyl ester (9CI) (CA INDEX NAME)

IC ICM G03C008-40 ICS G03C007-38; G03C007-413

CC 74-7 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

ST pyrazolotriazole cyan coupler silver photothermog; phenol developer silver photothermog; thermal development silver photog

IT Photographic developers

(phenol compds.; thermally developable silver halide photosensitive material)

IT Photothermographic copying

(thermally developable silver halide photosensitive material)

IT Photographic couplers

(cyan, pyrazolotriazoles; thermally developable silver halide photosensitive material)

IT 151019-65-7 180094-02-4

(cyan coupler; thermally developable silver halide photosensitive material)

IT 180094-01-3P 180094-03-5P

(cyan coupler; thermally developable silver
halide photosensitive material)

IT 154021-52-0

(cyan coupler; thermally developable silver
halide photosensitive material)

IT 5930-28-9 51767-45-4 180094-05-7 (developer; thermally developable silver halide

photosensitive material)

IT 180094-04-6P

(developer; thermally developable silver halide photosensitive material)

IT 53572-73-9P 180094-06-8P

(phenol compd. developer prepn. for thermally developable silver halide photosensitive material)

IT 96-97-9, 5-Nitrosalicylic acid 29710-58-5, 3,5-Dimethoxycarbonylbenzenesulfonyl chloride 180094-07-9 (phenol compd. developer prepn. for thermally developable silver halide photosensitive material)

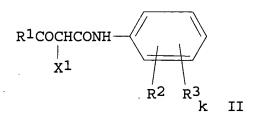
IT 50-00-0, Formaldehyde, reactions 70-55-3, p-Toluenesulfonamide (pyrazolotriazole photog. coupler prepn. for thermally developable silver halide photosensitive material)

L66 ANSWER 12 OF 39 HCA COPYRIGHT 2005 ACS on STN

124:215868 Silver halide photosensitive materials.

Negoro, Masayuki; Morigaki, Masakazu (Fuji Photo Film Co Ltd, Japan). Jpn. Kokai Tokkyo Koho JP 07261350 A2 19951013 Heisei, 51 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1994-71296 19940317.

GΙ



The title materials contain .gtoreq.1 compd. Ar1CH2S(:0)(:0)nCH2Ar2 (I; Ar1, Ar2 = aryl; n = 0, 1) in .gtoreq.1 layer formed on a support. The layer contg. I may be a yellow coupler-contg. layer, and the yellow coupler may be II (R1 = tert-alkyl, aryl, NR4R5; R2 = H, halo, alkoxy, aryloxy, alkyl, dialkylamino; R3 = substituent; X1 = H, releasing group by the reaction with primary amine color developer oxide; h = 0-4; R4-5 = alkyl, alkenyl, aryl, heterocycle, R4 and R5 may form a ring). The materials provide dye images with good color reproducibility and light fastness and show less stains on the unexposed areas.

IT 174213-95-7

(magenta coupler; **photog.** film contg. coupler and color stabilizer)

RN 174213-95-7 HCA

CN Benzenesulfonamide, N-[3-[[[3-[7-[[2-butoxy-5-(1,1,3,3-tetramethylbutyl)phenyl]thio]-6-(2-phenylethoxy)-1H-pyrrolo[1,2-b][1,2,4]triazol-2-yl]phenyl]amino]sulfonyl]-4-(octyloxy)phenyl]-2-(octyloxy)-5-(1,1,3,3-tetramethylbutyl)- (9CI) (CA INDEX NAME)

PAGE 1-A

$$\begin{array}{c} \text{Me} \\ \text{Me}_{3}\text{C-CH}_{2}\text{-C-Me} \\ \text{O} \\ \text{S-NH} \\ \text{O} \\ \text{O} \\ \text{O} \\ \text{NH} \\ \text{O} \\ \text{O} \\ \text{NH} \\ \text{O} \\ \text{O} \\ \text{O} \\ \text{NH} \\ \text{O} \\$$

PAGE 1-B

$$--$$
 O- CH₂- CH₂- Ph

- IC ICM G03C007-392
 - ICS G03C007-00; G03C007-36; G03C007-38
- CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
- ST sulfoxide sulfone photog color stabilizer; coupler

photog material

IT **Photographic** couplers

(photog. film contg. coupler and color stabilizer)

IT Photographic films

(**photog.** film contg. sulfone or sulfoxide compd. as color stabilizer)

IT 151019-65-7 156772-91-7 158293-26-6 158462-58-9 174213-91-3 174213-92-4 174368-61-7 (cyan coupler; photog. film contg. coupler and color

(cyan coupler; **photog.** film contg. coupler and color stabilizer)

- IT 174213-96-8P

(oxidn. of; prepn. of sulfoxide or sulfone compd. photog
. color stabilizer)

IT 620-32-6 7052-62-2 51439-45-3 66259-60-7 69511-16-6 74002-21-4 75773-13-6 81229-36-9 84355-04-4 84355-06-6 89929-65-7 89946-62-3 116089-83-9 129686-21-1 140201-11-2 160173-30-8 174213-84-4 174213-85-5 174213-86-6 174213-87-7 174213-88-8 174213-89-9

(photog. film contg. sulfone or sulfoxide compd. as color stabilizer)

IT 174213-82-2P 174213-83-3P

(photog. film contg. sulfone or sulfoxide compd. as color stabilizer)

- IT 1313-82-2, Sodium sulfide, reactions 118468-30-7 (prepn. of sulfoxide or sulfone compd. photog. color stabilizer)
- L66 ANSWER 13 OF 39 HCA COPYRIGHT 2005 ACS on STN
- 123:270643 Treatment of silver halide color photographic materials with specific pyrrolotriazole compounds. Hirabayashi, Shigeto (Konishiroku Photo Ind, Japan). Jpn. Kokai Tokkyo Koho JP 07140617 A2 19950602 Heisei, 31 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1993-283607 19931112.

GI

AB In the treatment comprising direct inserting a solid treatment agent in the developing soln. of an automatic developing machine, .gtoreq.1 emulsion layer contains .gtoreq.1 cyan coupler compd. of I-IV [R1-3 and Y = H, substituent; EWG = electron attractive group of .sigma.p .gtoreq.0.3 (.sigma.p = Hammet's substituent const.); X = H, group leaving by a reaction with oxidized color development agent]. The treatment provides good light-resistant images and uniform sensitivity in running treatment.

IT 150982-36-8 150982-37-9 151019-82-8 151019-83-9 169225-56-3

(silver halide photog. materials with pyrrolotriazole cyan couplers)

Ι

RN 150982-36-8 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid,
2-[2-[2-[2,4-bis(1,1-dimethylpropyl)phenoxy]-1oxobutyl]amino]phenyl]-5-[[2-butoxy-5-(1,1,3,3tetramethylbutyl)phenyl]thio]-6-cyano-, 1-methylethyl ester (9CI)
(CA INDEX NAME)

PAGE 1-A

PAGE 2-A

RN 150982-37-9 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, 2-[3-[[2-[2,4-bis(1,1-dimethylpropyl)phenoxy]-1-oxobutyl]amino]phenyl]-5-[[2-butoxy-5-(1,1,3,3-tetramethylbutyl)phenyl]thio]-6-cyano-, 1-methylethyl ester (9CI) (CA INDEX NAME)

RN 151019-82-8 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, 5-[[2-(benzoylamino)phenyl]thio]-2-[5-[[2-[2,4-bis(1,1-dimethylpropyl)phenoxy]-1-oxooctyl]amino]-2-methoxyphenyl]-6-cyano-, 2-methoxy-2-oxoethyl ester (9CI) (CA INDEX NAME)

RN 151019-83-9 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, 2-[2-[2-[2,4-bis(1,1-dimethylpropyl)phenoxy]-1oxobutyl]amino]phenyl]-5-[[2-butoxy-5-(1,1,3,3tetramethylbutyl)phenyl]thio]-6-cyano-, 2-ethoxyethyl ester (9CI) (CA INDEX NAME)

PAGE 1-A

$$\begin{array}{c} \text{Me} \\ \text{Me} \\ \text{Me} \\ \text{OBu-n} \\ \text{S} \\ \text{NC} \\ \text{N} \\ \text{N} \\ \text{N} \\ \text{EtO-CH}_2\text{-CH}_2\text{-O-C} \\ \\ \text{O} \\ \end{array}$$

PAGE 2-A

RN 169225-56-3 HCA

CN Benzenesulfonamide, N-[4-chloro-3-[6-cyano-5-[[2-[[(diethylamino)carbonyl]amino]phenyl]thio]-7-(2,2-dimethyl-1oxopropyl)-1H-pyrrolo[1,2-b][1,2,4]triazol-2-yl]phenyl]-2-(octyloxy)-4-(1,1,3,3-tetramethylbutyl)- (9CI) (CA INDEX NAME)

IC ICM G03C007-407

> G03C005-26; G03C007-26; G03C007-38; G03C007-42; G03C007-44 ICS

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

silver halide color photog treatment; STpyrrolotriazole cyan coupler photog material

Photographic processing IT

(automatic)

IT Photographic couplers

(cyan, pyrrolotriazoles as)

IT 150982-36-8 150982-37-9 151019-65-7

151019-82-8 151019-83-9 151865-61-1

156122-99-5 161255-63-6

161255-77-2 161301-54-8 161301-60-6

169225-54-1 169225-55-2 **169225-56-3** 169225-57-4

169225-59-6 169225-58-5 169340-13-0

(silver halide photog. materials with pyrrolotriazole cyan couplers)

L66 ANSWER 14 OF 39 HCA COPYRIGHT 2005 ACS on STN

123:97753 Color photographic material, image

formation, and manufacture of color proof. Kato, Seiichi (Fuji Photo Film Co Ltd, Japan). Jpn. Kokai Tokkyo Koho JP 07064254 A2 19950310 Heisei, 36 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1993-232396 19930825.

AB The material has a photosensitive laminate contg. .gtoreq.1 yellow Ag halide emulsion layer, .gtoreq.1 magenta

Ag halide emulsion layer, and .gtoreq.1 cyan

Ag halide emulsion layer, where emulsion layers

has .gtoreg.1 pan-photosensitive Ag halide layer

at the nearest side of a support. Images are formed by

exposing the material and developing with a soln. contq.

H2N-1,4-C6H4N(R1)(R2OH) (R1 = alkyl; R2 = alkylene; R1 and R2 may form a ring). Images may be formed by exposing for

.ltoreq.10-3 s and developing. The color proof is manufd. by

exposing the material using a cyan dot-image film, a magenta dot-image film, a yellow dot-image film, and a black dot-image film and developing. The material showed good dot reproductivity.

IT 164157-94-2

CN

(photog. coupler; silver halide
photog. material, aminoaniline deriv. developing soln.,
and manuf. of color proof)

RN 164157-94-2 HCA

Benzenesulfonamide, N-[3-[[[3-[7-[[2-butoxy-5-(1,1,3,3-tetramethylbutyl)phenyl]thio]-6-(2-phenoxyethoxy)-1H-pyrrolo[1,2-b][1,2,4]triazol-2-yl]phenyl]amino]sulfonyl]-4-(octyloxy)phenyl]-5-octyl-2-(octyloxy)- (9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 1-B

```
O-(CH_2)_7-Me
    (CH<sub>2</sub>)<sub>7</sub>-Me
IC
     ICM G03C007-20
     ICS
          G03C001-485; G03C005-08; G03C007-00; G03C007-26; G03C007-407;
          G03F003-10
CC
     74-2 (Radiation Chemistry, Photochemistry, and
     Photographic and Other Reprographic Processes)
     Section cross-reference(s): 25
     silver halide photog aminoaniline
ST
     developer
IT
     Graphic arts
        (color proof; silver halide photog.
        material, aminoaniline deriv. developing soln., and manuf. of
        color proof)
IT
     Photographic couplers
       Photographic developers
       Photographic emulsions
        (silver halide photog. material,
        aminoaniline deriv. developing soln., and manuf. of color proof)
IT
     346-10-1
                54942-74-4
                             95050-16-1
                                           137320-46-8
                                                          146558-35-2
                   164157-93-1 164157-94-2
     151745-02-7
                                              164157-95-3
     164157-96-4
                   164157-98-6
                                 165754-73-4
        (photog. coupler; silver halide
        photog. material, aminoaniline deriv. developing soln.,
        and manuf. of color proof)
IT
     14623-68-8
        (silver halide photog. material,
        aminoaniline deriv. developing soln., and manuf. of color proof)
L66 ANSWER 15 OF 39 HCA COPYRIGHT 2005 ACS on STN
122:118794 Silver halide color photographic
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material and processing of same. Kobayashi, Hidetoshi; Adachi, Keiichi (Fuji Photo Film Co Ltd, Japan). Jpn. Kokai Tokkyo Koho JP 06186708 A2 19940708 Heisei, 75 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1992-353761 19921215.

GΙ

AB. The title photog. material utilizing .gtoreg. 1 Ag halide photog. emulsion layers contains .gtoreq. 1 R-E1-L-E2-(T)m-PUG [E1, E2 = electrophilic group, L = single bond, linking group allowing the formation of a 5-7-membered ring via the reaction of E1 and E2 with nucleophilic moiety; R = H, substituent, T = timing group; PUG = photog. useful group; m = 0-2] and .gtoreq. 1 couplers selected from I and II [Za = NH, CH(R13); Zb, Zc = C(R14), N; R11, R12, R13 = electron withdrawing group with Hammett substituent const. .sigma.p .gtoreq. 0.20; the sum of the .sigma.p values for R11 and R12 is .gtoreq.0.65; R14, R21 = H, substituent; R22 = substituent,; Z2 = atoms required to form a 6-membered Nheterocycle; X1, X2 = H, group releasable on reacting with primary arom. amine-type color developing agent]. The processing of the photog. material is effected in the presence of a di-nucleophilic-type reagent, such as hydroxylamines, hydroxamic acids, H2O2, hydrazines, diamines, etc.

IT 153004-06-9

(cyan coupler; color photog. material contg.)

RN 153004-06-9 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, 6-cyano-5-[[2-(ethoxycarbonyl)phenyl]thio]-2-[3-[[[4-[[(2-hexyldecyl)oxy]carbonyl]phenyl]sulfonyl]amino]-4-methoxyphenyl]-, 2-(diethylamino)-2-oxoethyl ester (9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 1-B

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ICS
          G03C007-305; G03C007-388; G03C007-392
CC
     74-2 (Radiation Chemistry, Photochemistry, and
     Photographic and Other Reprographic Processes)
ST
     color photog material filter dye
IT
     Photographic films
        (color, filter dye fixing and decolorization improved)
IT
     Photographic couplers
        (cyan, for silver halide color photog
        . material)
IT
     146822-29-9P
                    151019-75-9P
                                    151019-76-0P
        (color photog. material from)
IT
     144266-85-3
                   151645-00-0
                                  151645-05-5 153004-06-9
     154021-51-9
                   154021-60-0
                                  154105-19-8
                                                154105-20-1
                                                               155494-47-6
     155494-48-7
                   155926-12-8
                                  156772-92-8
                                                160745-45-9
                                                               160792-19-8
        (cyan coupler; color photog. material contq.)
```

(cyan coupler; color photog. material contg.)

- (CH₂)₇-Me

ICM

G03C007-38

151019-65-7P

IC

IT

IT 134519-31-6 144215-04-3 159062-77-8 160745-35-7 160745-36-8 160745-37-9 160745-38-0 160745-39-1 160745-40-4 160745-41-5 160745-42-6 160745-43-7 160745-44-8 (precursor for photog. useful compd; color photog. material contg.)

L66 ANSWER 16 OF 39 HCA COPYRIGHT 2005 ACS on STN

122:42587 Silver halide color photographic
material with improved photographic performance and shelf
life. Obayashi, Keiji; Shimada, Yasuhiro (Fuji Photo Film Co Ltd,
Japan). Jpn. Kokai Tokkyo Koho JP 06003782 A2 19940114
Heisei, 121 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP
1992-180616 19920616.

GI

$$R^{1}$$
 R^{2}
 R^{21}
 R^{22}
 X^{1}
 X^{2}
 $X^$

AB The title material comprises a non-coloring, non-diffusive carboxylic acid (salt) and a cyan coupler I or II [Za = NH, CHR13; Zb, Zc = CR14, N; R11-13 = electron-withdrawing group having Hammett substituent const. (.sigma.p).gtoreg.0.20 with (.sigma.p of R11) + (.sigma.p of R12).gtoreq.0.65; R14, R21 = H, substituent; R22 = R11) + (.sigma.p of R12).gtoreq.0.65; R14, R21 = H, substituent; R22 = R11) + (.sigma.p of R12).gtoreq.0.65; R14, R21 = H, substituent; R22 = R11) + (.sigma.p of R12).gtoreq.0.65; R14, R21 = H, substituent; R22 = R11) + (.sigma.p of R12).gtoreq.0.65; R14, R21 = H, substituent; R22 = R11) + (.sigma.p of R12).gtoreq.0.65; R14, R21 = H, substituent; R22 = R11) + (.sigma.p of R12).gtoreq.0.65; R14, R21 = H, substituent; R22 = R11) + (.sigma.p of R12).gtoreq.0.65; R14, R21 = H, substituent; R22 = R11) + (.sigma.p of R12).gtoreq.0.65; R14, R21 = H, substituent; R22 = R11].gtoreq.0.65; R14, R21 = R11].gtoreq.0.65; R14, R21 = R11].gtoreq.0.65; R14, R21 = R11].gtoreq.0.65; R14, R21 = R11].gtoreq.0.65; R14, R21].gtoreq.0.65; R14, Rsubstituent; Z = non-metal atoms forming N-contg. 6-membered heterocycle with .qtoreq.1 dissociative substituent; X1, X2 = group leaving upon coupling with oxidized arom. primary amine developing agent]. The title material also contains A(L1)j(L2)m(L3n-PUG)s or AL4L5-PUG [A = coupler residue, redox group; L1, L3 = divalent timing group; L2 = .gtoreq.3-valent timing group; PUG = photog. useful group; j, n = 0-2; m = 1, 2; s .gtoreq.2; L4 = OCO, OSO, OSO2, OCS, SOC, SCS, WCR11R12; W = O, S, NR13; R11-12 = H, substituent; R13 = substituent; L5 = group releasing PUG upon electron transfer, L4].

IT 158035-36-0

(cyan coupler, for improved photog. performance)

RN 158035-36-0 HCA

CN 1H-Pyrrolo[2,1-c]-1,2,4-triazole-7-carboxylic acid,
3-[3-[4-(acetylamino)phenyl]propyl]-5-[(2-butoxy-5-octylphenyl)thio]6-cyano-, 3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctyl ester (9CI)

(CA INDEX NAME)

0

```
O-CH_2-CH_2-(CF_2)_5-CF_3
Me-(CH<sub>2</sub>)<sub>7</sub>
                       Η
         NC
                              (CH_2)_3
                                              NHAc
    OBu-n
IC
     ICM
          G03C007-38
     ICS
          G03C007-305; G03C007-392
CC
     74-2 (Radiation Chemistry, Photochemistry, and
     Photographic and Other Reprographic Processes)
     Section cross-reference(s): 41
ST
     photog cyan coupler carboxylic acid; development inhibitor
     releasing compd photog
IT
     Photographic development
        (development inhibitor-releasing compds for)
     Carboxylic acids, uses
IT
        (photog. emulsions contg., for high-performance
        photog.)
IT
     Photographic paper
        (color, with superior photog. properties)
IT
     Photographic couplers
        (cyan, for improved photog. performance)
IT
     145601-00-9
                    148398-08-7
                                  155363-44-3
        (DIR coupler, for improved photog. performance)
IT
     144266-85-3
                    151645-00-0
                                  151645-05-5
                                                 151645-10-2
                                                                151645-12-4
                   154021-48-4
     151645-14-6
                                  154021-49-5
                                                 154021-59-7
                                                                154021-60-0
     154105-22-3
                    155926-12-8
                                  155926-13-9
                                                 155926-17-3
                                                                156262-24-7
     156740-16-8
                   157516-73-9
                                                 158035-35-9
                                  158035-30-4
     158035-36-0
                   158035-37-1
                                  158907-87-0
        (cyan coupler, for improved photog. performance)
IT
     5036-92-0
                 13402-96-5
                               14230-52-5
                                             40596-46-1
                                                           54680-48-7
     55205-50-0
                  63494-23-5
                                69080-86-0
                                              72076-45-0
                                                            87017-00-3
     116356-90-2
                   116624-98-7
                                  116625-04-8
                                                 116646-28-7
                                                                121700-11-6
     122890-93-1
                   158035-39-3
                                  158035-40-6
                                                 158035-41-7
                                                                158035-42-8
     158035-43-9
                   159028-35-0
        (non-diffusive, photog. material contg., for improved
        photog. performance)
IT
     144291-02-1P
                     144365-57-1P
                                    146495-94-5P
                                                    146495-95-6P
     148398-05-4P
                     150114-50-4P
                                    154161-35-0P
```

(prepn. and use of, DIR coupler, for improved photog.

performance)
IT 151019-65-7P 151645-01-1P
(prepn. and use of, as cyan coupler, for improved photog
. performance)

L66 ANSWER 17 OF 39 HCA COPYRIGHT 2005 ACS on STN

122:20315 processing method for color photographic material.

Hayashi, Hiroshi (Fuji Photo Film Co Ltd, Japan). Jpn. Kokai Tokkyo Koho JP 05341470 A2 19931224 Heisei, 93 pp. (Japanese).

CODEN: JKXXAF. APPLICATION: JP 1992-168280 19920604.

GI For diagram(s), see printed CA Issue.

AB In processing a color photog. material comprising, on .gtoreq.1 side of a support, .gtoreq.1 layer contg. a

In processing a color **photog**. material comprising, on .gtoreq.1 side of a support, .gtoreq.1 layer contg. a diffusion-resistant oil-sol. coupler for forming a dye upon coupling with an oxidized arom. primary amine developing agent and a silver halide emulsion, the couper is represented by the formula I (X = an org. group necessary for forming a N-contg. heterocyclic group along with the N atom; Y = an arom. or heterocyclic group; Z = a group releasable upon reaction with the oxidized developing agent) and the photog. material is fixed, after color development, in a soln. contg. .gtoreq.1 compd. selected from the group consisting of thioethers, mesoionic compds., and N-contg. heterocyclic compds. contg. sulfide groups.

IT 150982-36-8

(cyan photog. coupler)

RN 150982-36-8 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, 2-[2-[[2-[2,4-bis(1,1-dimethylpropyl)phenoxy]-1-oxobutyl]amino]phenyl]-5-[[2-butoxy-5-(1,1,3,3-tetramethylbutyl)phenyl]thio]-6-cyano-, 1-methylethyl ester (9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 2-A

IC ICM G03C007-42

ICS G03C001-035; G03C007-36; G03C007-38

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

ST fixing processing color **photog** material; thioether fixer color **photog** material; mesoionic compd fixer color **photog**

IT Photographic couplers

(acetamide derivs. as, diffusion-resistant)

IT **Photographic** processing

(color, fixing solns. contg. thioethers and nitrogen-contg.

heterocyclic compds. for)

IT 150982-36-8

(cyan photog. coupler)

IT 143324-21-4P 143324-22-5P 150982-32-4P 150982-34-6P 152586-71-5P 152586-72-6P 152586-73-7P 157973-58-5P (prepn. and reaction of, in prepg. cyan photog. coupler)

IT 153504-51-9P 153504-52-0P (prepn. and reaction of, in prepg. yellow photog. coupler)

IT 143324-37-2P 143779-40-2P

(prepn. and use of, as cyan photog. coupler)

IT 157973-56-3P

(prepn. and use of, as yellow photog. coupler)

IT 120-72-9, 1H-Indole 157516-87-5

(reaction of, in prepg. yellow photog. coupler)

IT 147495-63-4 153504-55-3 153504-60-0 157516-90-0 157973-52-9 157973-53-0 157973-54-1 157973-55-2 157973-57-4 (yellow photog. coupler)

L66 ANSWER 18 OF 39 HCA COPYRIGHT 2005 ACS on STN

121:289517 Color silver halide photographic material. Kobayashi, Hidetoshi (Fuji Photo Film Co Ltd, Japan).

material. Kobayashi, Hidetoshi (Fuji Photo Film Co Ltd, Japan) Jpn. Kokai Tokkyo Koho JP 06102639 A2 19940415 Heisei, 85 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1992-277732 19920924.

GΙ

$$\begin{array}{c|cccc}
R^{11} & R^{12} \\
X^{1} & X^{2a} & Z^{2a} \\
X^{2c} & Z^{2b} & I
\end{array}$$

AB In the title color photog. material comprising .gtoreq.1

Ag halide photog. emulsion layers on its
support, at least 1 of the photog. emulsions is
Te-sensitized, and the photog. material contains a cyan
coupler selected from I and II [Za = NH, CHR13; Zb, Zc = -C(R14)=,

N; R11-13 = electron-withdrawing group of Hammett's substituent const. .gtoreq.0.20; R14,21 = H, substituent; R22 = substituent; Z2 = non-metallic atoms required to complete a 6-membered N-contg. heterocyclic ring; X1,2 = H, group releasable on coupling reaction with oxidized arom. amine developing agent]. This material shows high photosensitivity and low fog level.

IT 153004-06-9

(cyan **photog**. coupler)

RN 153004-06-9 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, 6-cyano-5-[[2-(ethoxycarbonyl)phenyl]thio]-2-[3-[[[4-[[(2-hexyldecyl)oxy]carbonyl]phenyl]sulfonyl]amino]-4-methoxyphenyl]-, 2-(diethylamino)-2-oxoethyl ester (9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 1-B

- (CH₂)₇-Me

IC ICM G03C007-38 ICS G03C001-09

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

ST color **photog** material cyan coupler; tellunium sensitizer **photog**

IT **Photographic** sensitizers

(Tellurium sensitizer for color photog. material)

IT Photographic couplers

(cyan, for low fog level and good storageability)

IT 144266-85-3 151645-00-0 151645-01-1 151645-05-5 151645-07-7 151645-09-9 151645-16-8 **153004-06-9** 154021-51-9 154021-60-0 154105-16-5 154105-19-8 154105-20-1 154105-22-3 155494-52-3 154105-26-7 155494-47-6 155494-48-7 155926-12-8 156262-24-7 156262-26-9 156772-90-6 156772-92-8 157516-74-0 157516-75-1 158035-35-9 158546-44-2 158600-65-8 158894-70-3 159082-04-9 159082-05-0 159082-06-1

(cyan **photog**. coupler)

IT 2935-46-8 21992-94-9 73475-28-2, Benzenecarbotelluroamide 75523-51-2 107728-32-5 147273-53-8 147623-14-1 154924-28-4 154924-29-5 154924-30-8 159082-03-8 (photog. tellurium sensitizer)

L66 ANSWER 19 OF 39 HCA COPYRIGHT 2005 ACS on STN

121:267669 silver halide color photographic

material. Ishii, Yoshio; Kawagishi, Toshio; Morita, Kensuke (Fuji Photo Film Co Ltd, Japan). Jpn. Kokai Tokkyo Koho JP 06083002 A2 19940325 Heisei, 99 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1992-260559 19920904.

GΙ

AB A silver halide color photog. material showing improved storage stability and color reproducibility and exhibiting decreased background staining after processing comprises a cyan coupler represented by the formula I or II (Za = NH or CHR5; Zb, Zc = N or CR6; R1, R2, R5 = an electron-attracting group having a Hammet's substituent const. .sigma.p of .gtoreg.0.20 with the sum

of the .sigma.p values for R1 and R2 being .gtoreq.0.65; R3, R6 = H or a substituent group; R4 = a substituent group; Z = a nonmetallic group for forming a N-contg. 6-membered ring; X1, X2 = H or a group to be released upon coupling reaction with an oxidized arom. primary amine developing agent) and a compd. represented by the formula AB (A = a group which releases the group B upon reaction with an oxidized developing agent and forms a compd. not contributing to the formation of a color image; B = a group which releases from the compd. upon coupling reaction with an oxidized developing agent).

IT 158718-58-2

CN

(cyan photog. coupler)

RN 158718-58-2 HCA

1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid,
5-[[2-bromo-6-(ethoxycarbonyl)phenyl]thio]-6-cyano-2-[3-[[[4-[[(2-hexyldecyl)oxy]carbonyl]phenyl]sulfonyl]amino]-4-methoxyphenyl]-,
2-(diethylamino)-2-oxoethyl ester (9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 1-B

--- CH- (CH₂)₇- Me
$$|$$
 (CH₂)₅- Me

```
IC
     ICM G03C007-38
          G03C007-305; G03C007-392
     ICS
CC
     74-2 (Radiation Chemistry, Photochemistry, and
     Photographic and Other Reprographic Processes)
     silver halide color photog material;
ST
     coupler photog cyan pyrroloazole
IT
     Photographic emulsions
        (color, contg. pyrroloazoles for improved color reproducibility)
IT
     Photographic couplers
        (cyan, pyrroloazoles as)
IT
     151019-65-7
                   151645-01-1
                                 154021-59-7
                                                154021-63-3
                                                              155926-12-8
     156233-84-0 158718-58-2
        (cyan photog. coupler)
IT
     2425-77-6
                 2905-62-6 3044-06-2
                                          54153-51-4
                                                       146822-29-9
     150172-54-6
                   151019-75-9
                                                154021-47-3
                                 151019-76-0
        (photog. coupler prepn. using)
                  113824-73-0
IT
     91137-52-9
                                158574-65-3
                                               158718-70-8
                                                             158718-71-9
        (photog. material additive prepn. using)
IT
     91377-29-6
                  158718-59-3
                                158718-60-6
                                               158718-61-7
                                                             158718-62-8
     158718-63-9
                   158718-64-0
                                 158718-65-1
                                                158718-66-2
                                                              158718-67-3
     158718-68-4
                   158718-69-5
                                 158760-50-0
                                                158760-51-1
        (silver halide color photog.
        materials contg.)
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L66 ANSWER 20 OF 39 HCA COPYRIGHT 2005 ACS on STN

121:267601 Silver halide color photographic material. Shimada, Yasuhiro; Yoneyama, Hiroyuki (Fuji Photo Film Co Ltd, Japan). Jpn. Kokai Tokkyo Koho JP 05323536 A2 19931207 Heisei, 48 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1992-157332 19920526.

Ι

GI

The title material has .gtoreq.1 layer(s) contg. a cyan coupler I [Za = NH, CHR3; Zb, Zc = CR4, N; R1-3 = electron-withdrawing group having a Hammett substituent const. .sigma.p .gtoreq.0.20 with (.sigma.p of R1)+(.sigma.p of R2).gtoreq.0.65; R4, Ra-e is an electron-withdrawing group; sum of .sigma.ps of Ra-e is .gtoreq.0.5 or .gtoreq.0.15 with .gtoreq.2 of Ra-e being Fs]. The cyan coupler showed a superior stability in the photog. material, good color rendition and gave stable color pictures.

IT 158600-49-8

(cyan coupler, with improved stability)

RN 158600-49-8 HCA

CN Benzoic acid, 2-[[6-acetyl-7-[[[2-chloro-5-[(dodecyloxy)carbonyl]phenyl]amino]carbonyl]-3-(3,5-dichlorophenyl)-1H-pyrrolo[2,1-c]-1,2,4-triazol-5-yl]thio]-3,5-dibromo-, dodecyl ester (9CI) (CA INDEX NAME)

IT 158600-47-6P

(prepn. and use of, as cyan coupler, with improved stability)

RN 158600-47-6 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid,
5-[[2-bromo-6-cyano-4-[(1-oxoundecyl)amino]phenyl]thio]-6-cyano-2-[3[[[2-(octyloxy)-5-(1,1,3,3-tetramethylbutyl)phenyl]sulfonyl]amino]phenyl]-, ethyl ester (9CI) (CA INDEX NAME)

PAGE 1-B

- CH₂- CMe₃

```
- (CH<sub>2</sub>)<sub>7</sub>-Me
```

IC ICM G03C007-38

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 28

ST color photog cyan coupler stability

IT Photographic emulsions

(color, for stability images)

IT Photographic couplers

(cyan, with good stability and color rendition)

IT 158600-48-7 **158600-49-8** 158600-50-1 158793-08-9 158793-09-0

(cyan coupler, with improved stability)

IT 158600-47-6P

(prepn. and use of, as cyan coupler, with improved stability)

L66 ANSWER 21 OF 39 HCA COPYRIGHT 2005 ACS on STN

121:217483 Silver halide color photographic

photosensitive material. Shono, Akiko (Fuji Photo Film Co Ltd,

Japan). Jpn. Kokai Tokkyo Koho JP 05297539 A2 **19931112** Heisei, 69 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1992-122881 19920417.

GI

$$W^{2} \xrightarrow{N} O = L^{1} - L^{2} = O = L^{3} - (-L^{4} = L^{5} - O) = W^{4} = L^{5} - O = M^{4} = L^{5} - O$$

AΒ In the title material having on a reflective support photog . constituent layers, .gtoreq.1 of the cyan color-forming Ag halide emulsion layers contains .gtoreq.1 kind(s) of cyan couplers I [Za, Zb = C(-R3), N, 1 of them is C(-R3) and the other isN; R1, 2 = electron-withdrawing group having Hammett's substituent const. .sigma.p >0.2, their sum of .sigma.p >0.65; R3 = H, substituent; X = H, group to be eliminated upon coupling; R1-3 and X may form divalent groups which may bond to a polymer larger than a dimer or a polymer chain to form homopolymer or copolymer] or II (all variable substituents are the same as above) and any 1 of the photog. constituent layers contains .gtoreq.1 of compds. III (W1, W3 = aliph. group, arom. group, heterocyclic group; W2, W4 = OW5, CO2W5, NW5W6, CONW5W6, etc.; W5, W6 = H, aliph. group, arom. group; W5 and W6 or W6 and W7 may bond together to form a 5- or 6-membered ring; L1-5 = methine group; n, m = 0, 1; M+ = H, monovalent cation). The material shows superior sharpness and color reprodn. without causing variations in photog. performance such as color performance, etc.

IT 150982-36-8

(cyan **photog.** coupler, for improved color reprodn and sharpness)

RN 150982-36-8 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, 2-[2-[2-[2,4-bis(1,1-dimethylpropyl)phenoxy]-1-oxobutyl]amino]phenyl]-5-[[2-butoxy-5-(1,1,3,3-

tetramethylbutyl)phenyl]thio]-6-cyano-, 1-methylethyl ester (9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 2-A

- IC ICM G03C007-38
 - ICS G03C001-047; G03C001-83
- CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
- ST silver halide color photog material; cyan photog coupler oxonol dye; color reprodn sharpness photog paper
- IT Photographic paper

(color, with improved color reprodn and sharpness)

IT Photographic couplers

(cyan, pyrrolotriazoles as)

IT 143779-39-9 **150982-36-8** 151019-66-8 154217-48-8 158061-71-3

(cyan **photog.** coupler, for improved color reprodn and sharpness)

IT 108910-30-1 115345-41-0 118156-04-0 124622-14-6 146692-68-4

152268-69-4 158061-72-4 158061-73-5 158061-74-6

(photog. constituent layer contg., for improved color reprodn and sharpness)

IT 143324-20-3P 143324-21-4P 143324-22-5P 150982-33-5P 150982-34-6P

(prepn. and reaction of, for cyan photog. coupler)

IT 143324-37-2P 143779-40-2P

(prepn. and use of, as cyan photog. coupler)

L66 ANSWER 22 OF 39 HCA COPYRIGHT 2005 ACS on STN

121:95793 Method for forming a color image. Kawai, Kiyoshi
(Fuji Photo Film Co., Ltd., Japan). Eur. Pat. Appl. EP 556858 A1

19930825, 84 pp. DESIGNATED STATES: R: DE, FR, GB.
(Japanese). CODEN: EPXXDW. APPLICATION: EP 1993-102688 19930219.
PRIORITY: JP 1992-72711 19920221.

GI

$$\begin{array}{c|c}
R^{2} & H \\
N & Z \\
N & Z_{b}
\end{array}$$

There is disclosed a method for forming a color image using a Ag halide color photog.

material having 3 Ag halide photosensitive layers on a support, comprising, in a cyan color-forming coupler-contg. photosensitive layer, a cyan dye-forming coupler represented by formula I [Za and Zb = -C(R3): or -N:, provided that 1 of Za and Zb = -N: and the other one is -C(R3):; R1 and R2 each = an electron-attracting group; R3 = H atom or a substituent; and X = a H atom or a coupling-off group, provided that R1, R2, R3, or X may be a divalent group, to form a dimer or higher polymer, or to bond to a polymer chain to form a homopolymer or copolymer; R2 and X may interchange their positions]. The material can be used for scanning exposure.

IT 150982-36-8

(photog. cyan coupler)

RN 150982-36-8 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, 2-[2-[2-[2,4-bis(1,1-dimethylpropyl)phenoxy]-1oxobutyl]amino]phenyl]-5-[[2-butoxy-5-(1,1,3,3tetramethylbutyl)phenyl]thio]-6-cyano-, 1-methylethyl ester (9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 2-A

IC ICM G03C007-38

CC 74-2 (Radiation Chemistry, Photochemistry, and

Photographic and Other Reprographic Processes) Section cross-reference(s): 41

ST cyan coupler photog pyrrolopyrrole; paper photog color scanning exposure

IT Photographic paper

(color, for scanning exposure)

IT Photographic couplers

(cyan, pyrrolopyrrole)

150982-35-7 **150982-36-8** IT 151019-64-6 151019-66-8 156440-79-8

(**photog.** cyan coupler)

IT 130367-21-4P 143324-20-3P 143324-21-4P 143324-22-5P 150982-34-6P 150982-32-4P 152586-70-4P 152586-73-7P 153575-65-6P

(prepn. and reaction of, photog. cyan coupler from)

IT 143779-40-2P 143324-37-2P

(prepn. and use of, as photog. cyan coupler)

L66 ANSWER 23 OF 39 HCA COPYRIGHT 2005 ACS on STN

121:95791 Silver halide color photographic

material. Seto, Nobuo; Yoshioka, Yasuhiro; Suzuki, Makoto; Morigaki, Masakazu (Fuji Photo Film Co Ltd, Japan). Jpn. Kokai Tokkyo Koho JP 05150426 A2 19930618 Heisei, 88 pp.

GI

(Japanese). CODEN: JKXXAF. APPLICATION: JP 1991-335916 19911127.

AB A silver halide color photog. material

contains at least one pyrroloazole cyan color-forming coupler (I and II; one of Za and Zb = CR3 and the other = N; R3 = H, substituent; R1, R2 = electron withdrawing group having a Hammett const. .sigma.p .gtoreq.0.20, provided that the sum of .sigma.p values of R1 and R2 is .gtoreq.0.65; X = H, group capable of leaving upon coupling with the oxidized form of an arom primary amine color developing agent; R1 - R3 or X may be a bivalent group and form a homopolymer or copolymer with dimer, higher oligomers, or a polymer chain) and a Ni compd. or complex in which Ni is bonded or coordinated to an O, S, or N atom of an org. compd. A combination of the cyan coupler I or II and a specific Ni complex (discoloration inhibitor) improves

coloration, color reprodn., and storage photostability of cyan images.

IT 150982-36-8

(cyan **photog**. coupler, color **photog**. paper contg. nickel complex and)

RN 150982-36-8 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, 2-[2-[2-[2,4-bis(1,1-dimethylpropyl)phenoxy]-1oxobutyl]amino]phenyl]-5-[[2-butoxy-5-(1,1,3,3tetramethylbutyl)phenyl]thio]-6-cyano-, 1-methylethyl ester (9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 2-A

- IC ICM G03C007-38 ICS G03C007-392
- CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
- ST color **photog** material; pyrroloazole cyan **photog** coupler; nickel complex color **photog** material; pyrrolotriazole cyan **photog** coupler
- IT Photographic paper

(color, contg. pyrroloazole cyan couplers and nickel complexes, for improved color reprodn. and cyan color **image** photostability)

- IT **Photographic** couplers
 - (cyan, pyrroloazole derivs., for improved color reprodn. and cyan color **image** photostability in combination with nickel complexes)
- IT 42950-65-2 93955-82-9 143779-40-2 155452-56-5 155452-57-6
 155452-58-7 155452-59-8 155452-60-1 156761-85-2 156790-38-4
 (discoloration inhibitor, color photog. paper contg.
 pyrrolotriazole cyan coupler and)
- IT 143324-37-2P 143779-40-2P (prepn. of, as cyan **photog**. coupler, color

photog. paper contg. nickel complex and)

- L66 ANSWER 24 OF 39 HCA COPYRIGHT 2005 ACS on STN
- 121:46483 Silver halide color photographic
 material. Nagaoka, Satoshi; Yamakawa, Kazuyoshi; Yamamoto, Mitsuru;
 Suzuki, Makoto; Shimada, Yasuhiro; Nagaoka, Katsuro; Ikeda, Hideo;
 Hara, Takefumi; Shuto, Sadanobu (Fuji Photo Film Co., Ltd., Japan).
 Eur. Pat. Appl. EP 566115 A1 19931020, 181 pp. DESIGNATED
 STATES: R: BE, DE, FR, GB, NL. (English). CODEN: EPXXDW.
 APPLICATION: EP 1993-106136 19930415. PRIORITY: JP 1992-119862

19920415.

AB There is disclosed a silver halide color photog. material having .gtoreq.1 red-sensitive silver halide emulsion layer, .gtoreq.1 green-sensitive silver halide emulsion layer, and .gtoreq.1 blue-sensitive silver halide emulsion layer, wherein .gtoreq.1 of the emulsion layers contains .gtoreq.1 cyan dye-forming coupler represented by the formula I wherein Za represents NH or CHR3, Zb and Zc represent CR4 or N, R1-3 represent an electron-attracting group wherein the Hammett substituent const. .sigma.p value is 0.20 or more, provided that the sum of the .sigma.p value of R1 and the .sigma.p value of R2 is 0.65 or more, R4 represents a hydrogen atom or a substituent, if there are two groups R4 in the formula, they may be the same or different, and X represents a hydrogen atom or a group capable of being released upon a coupling reaction with the oxidized product of an arom, primary amine color-developing agent, provided that R1-4 or X may be a divalent group to form a homopolymer or a copolymer by bonding with a dimer or higher polymer or polymer chain and .gtoreq.1 sensitizing dye contq. a sulfonamido group.

IT 153004-06-9

(cyan photog. coupler)

RN 153004-06-9 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, 6-cyano-5-[[2-(ethoxycarbonyl)phenyl]thio]-2-[3-[[[4-[[(2-hexyldecyl)oxy]carbonyl]phenyl]sulfonyl]amino]-4-methoxyphenyl]-, 2-(diethylamino)-2-oxoethyl ester (9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 1-B

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ICS
          G03C007-30; G03C007-305; G03C001-14
     74-2 (Radiation Chemistry, Photochemistry, and
CC
     Photographic and Other Reprographic Processes)
ST
     silver halide color photog material;
     pyrrolopyrazole cyan photog coupler
IT
     Photographic couplers
        (cyan, pyrrolopyrazoles as)
                   152828-33-6 153004-06-9
IT
     152828-30-3
                                              154021-49-5
     154021-50-8
                   155926-12-8
                                  155926-13-9
                                                155926-15-1
                                                               155926-16-2
     155926-17-3
                   155926-18-4
                                  155926-19-5
                                                155926-20-8
                                                               155926-21-9
                                  155965-03-0
     155926-22-0
                   155926-23-1
        (cyan photog. coupler)
IT
     146822-29-9P
                    151019-75-9P
                                    151019-76-0P
        (prepn. and reaction of, in prepg. cyan photog.
```

(prepn. and use of, as cyan photog. coupler)

-- (CH₂) 7 - Me

ICM

G03C007-38

coupler)

151019-65-7P

IC

IT

IT 2425-77-6 2905-62-6 154021-47-3 (reaction of, in prepg. cyan photog. coupler) IT 148364-35-6 148364-36-7 148364-38-9 149702-96-5 148364-34-5 149703-02-6 149703-03-7 149703-04-8 (silver halide color photog. materials contg. pyrrolopyrazole cyan photog couplers and)

L66 ANSWER 25 OF 39 HCA COPYRIGHT 2005 ACS on STN 121:46475 Silver halide color photographic materials with improved cyan color-forming properties. Naruse, Hideaki; Suzuki, Makoto (Fuji Photo Film Co Ltd, Japan). Jpn. Kokai Tokkyo Koho JP 05204110 A2 19930813 Heisei, 89 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1992-298264 19921012. PRIORITY: JP 1991-335841 19911127.

GI

- * STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY AVAILABLE VIA OFFLINE PRINT *
- The Ag halide color photog. material, AΒ having .gtoreq.1 Ag halide emulsion layer on a support, comprises .gtoreq.1 pyrrolotriazole cyan coupler represented by I or II [Za, Zb = -C(R3):, -N:; Za or Zb is -N:; R1,2 = electron-acceptor with Hammett substitution const. .sigma.p.gtoreq.20; .sigma.p of (R1 + R2) is .gtoreq.0.65; R3 = H, substituent; X = H, releasing moiety upon coupling reaction with oxidn. product of arom. primary amine color developing agent; R1-3 and X can be divalent moieties to form dimer or higher, or copolymer]; and. .gtoreq.1 Cyan coupler represented by III, IV [R11] = alkyl, aryl, heterocyclyl; R12 = C.gtoreq.2 alkyl; R13 = H, halo, alkyl, aryl, alkoxy, aryloxy, carbonamido, ureido; R14 = alky, aryl, heterocyclyl, alkoxy, aryloxy, amino; X' = H, releasing moiety upon coupling reaction with oxidn. product of arom. primary amine color developing agent; n = 0, 1; R12 and R13 of III and R13 and R14 of IV may form rings], V, and VI [Q = naphthol nucleus coupler residue bonded at 2nd position; R1 = H, alkyl, alkenyl, alkynyl, cycloalkyl, aralkyl, alkoxy, amino, aryl; R2 = moiety substitutable on benzene ring; R3,4 = H, alkyl, aryl, halo, alkoxy, aryloxy; R5,6 = H, alkyl, aryl; t = 0-4; m = 0-4].
- 143324-39-4 150982-36-8 150982-37-9 IT (cyan coupler, silver halide color photog. material contq.)
- 143324-39-4 HCA RN
- CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-6-carboxylic acid, 5-[[2-butoxy-5-(1,1,3,3-tetramethylbutyl)phenyl]thio]-7-cyano-2-[3-

[[[5-[[[5-octyl-2-(octyloxy)phenyl]sulfonyl]amino]-2(octyloxy)phenyl]sulfonyl]amino]phenyl]-, methyl ester (9CI) (CA
INDEX NAME)

Me
$$C-CH_2-CMe_3$$

Me $O-C$

Me $O-C$

NH O

RN 150982-36-8 HCA
CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid,
2-[2-[[2-[2,4-bis(1,1-dimethylpropyl)phenoxy]-1oxobutyl]amino]phenyl]-5-[[2-butoxy-5-(1,1,3,3tetramethylbutyl)phenyl]thio]-6-cyano-, 1-methylethyl ester (9CI)
(CA INDEX NAME)

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RN 150982-37-9 HCA
CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid,
2-[3-[[2-[2,4-bis(1,1-dimethylpropyl)phenoxy]-1oxobutyl]amino]phenyl]-5-[[2-butoxy-5-(1,1,3,3tetramethylbutyl)phenyl]thio]-6-cyano-, 1-methylethyl ester (9CI)
(CA INDEX NAME)

IC ICM G03C007-38 ICS G03C007-34

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

ST pyrrolotriazole cyan photog coupler; silver halide color photog material

IT Photographic couplers

(cyan, pyrrolotriazole-type, combined with phenol types or naphthol types)

IT 2923-93-5 92589-17-8 96758-05-3 99661-33-3 101664-25-9 117827-06-2 143324-23-6 **143324-39-4** 143324-43-0

143767-12-8 143779-40-2 143779-41-3 149125-97-3 150982-35-7

150982-36-8 150982-37-9 151019-66-8

152793-67-4 152793-70-9 152793-75-4 156122-99-5 156123-00-1

156123-01-2 156123-02-3 156123-03-4 156123-04-5 156123-05-6

156123-06-7 156123-07-8 156123-09-0

(cyan coupler, silver halide color photog. material contg.)

L66 ANSWER 26 OF 39 HCA COPYRIGHT 2005 ACS on STN

121:22348 Silver halide color photographic

material. Morigaki, Masakazu; Yoshioka, Yasuhiro; Seto, Nobuo (Fuji Photo Film Co., Ltd., Japan). Eur. Pat. Appl. EP 544317 A1 19930602, 92 pp. DESIGNATED STATES: R: DE, FR, GB, NL. (English). CODEN: EPXXDW. APPLICATION: EP 1992-120282 19921127.

PRIORITY: JP 1991-335811 19911127.

GI

AB A Ag halide color photog. material

having excellent color reproducibility and improved preservability after development comprises a support having thereon one or more Ag halide emulsion layers, wherein .gtoreq.1 of the Ag halide emulsion layers contains .gtoreq.1 cyan coupler selected from the group of compds. represented by the formula I and II (Za, Zb = CR3 or N, provided that one of Za and Zb is N and the other is CR3; R1, R2 = an electrophilic group whose Hammett's substituent const. .sigma.p is .gtoreq.0.20 provided that the sum of .sigma.p of R1 and R2 is .gtoreq.0.65; R3 = H or a substituent group; X = H or a group capable of splitting off upon reaction with an oxidized arom. primary amine color developing agent) which may be a part of a polymer or copolymer. The photog. material also contains .gtoreq.1 lipophilic compd. selected from the group of compds. represented by the formulas

R4Z1C(Z2)R5, R6X1, and R7R8C=CR9F10 (Z1 = a single bond, O, S, CO, or NR11; R4, R11 = an aliph., arom., or heterocyclic group; Z2 = O or S; R5 = H, heterocyclyl, OR12, SR13, or Z3C(Z2)R14; R6 = an aliph. group; X1 = halogen; R7-9 = H, an aliph., arom., or heterocyclic group, or R10; R10 = cyano, acyl, formyl, carbamoyl, sulfamoyl, sulfonyl, or an aliph. or arom. oxycarbonyl group and .gtoreq.2 of R7-10 may be connected to each other to form a 5-7-membered ring; R12-13 = vinyl or an arom. or heterocyclic group; R14 = an aliph., arom., or heterocyclic group and .gtoreq.2 of R4, Z2, and R5 may be connected to each other to form a 5-7-membered ring) which chem. bond to an arom. primary amine color developing agent in a pH range of .ltoreq.8 to form a colorless product and/or .gtoreq.1 lipophilic compd. represented by the formula R15X2 (R15 = an aliph. or arom. group; X2 = a mercapto group or SO2Y; Y = H, an atom, or an at. group which forms an inorg. or org. salt).

IT · 146822-40-4

(photog. cyan coupler, for producing dye images of improved color reproducibility)

RN 146822-40-4 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-6-carboxylic acid,
5-[[2-butoxy-5-(1,1,3,3-tetramethylbutyl)phenyl]thio]-7-cyano-2-[3[[[2-(octyloxy)-5-[[[2-(octyloxy)-5-(1,1,3,3tetramethylbutyl)phenyl]sulfonyl]amino]phenyl]sulfonyl]amino]phenyl], methyl ester (9CI) (CA INDEX NAME)

IC ICM G03C007-30

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

ST silver halide color photog material;

pyrrolotriazole cyan coupler color photog

IT Photographic emulsions

(color, contg. pyrrolotriazole cyan dye formers and lipophilic compds.)

IT Photographic couplers

(cyan, pyrrolotriazoles as, for producing dye **images** of excellent color reproducibility)

IT 143779-39-9 146822-40-4 150982-35-7 151019-65-7 (photog. cyan coupler, for producing dye images of improved color reproducibility)

IT 130367-21-4P 143324-20-3P 143324-21-4P 143324-22-5P 150982-32-4P 150982-33-5P 150982-34-6P 152586-70-4P

152586-72-6P 152586-73-7P

(prepn. and reaction of, in prepg. photog. cyan coupler)

IT 143324-37-2P 143779-40-2P

(prepn. and use of, as **photog**. cyan coupler for producing dye **images** of improved color reproducibility)

IT 629-93-6 115895-05-1 115895-09-5 115895-30-2 115895-45-9 120018-34-0 129840-65-9 136094-74-1 141915-64-2 154306-13-5 154306-14-6

(silver halide color photog.

materials contg. pyrrolotriazole cyan couplers and, for forming dye images of improved color reproducibility)

L66 ANSWER 27 OF 39 HCA COPYRIGHT 2005 ACS on STN

120:284795 Method for processing color photographic material.

Hayashi, Hiroshi (Fuji Photo Film Co., Ltd., Japan). Eur. Pat.

Appl. EP 557851 Al 19930901, 106 pp. DESIGNATED STATES:

R: DE, FR, GB, NL. (English). CODEN: EPXXDW. APPLICATION: EP 1993-102355 19930215. PRIORITY: JP 1992-59124 19920214.

GΙ

AB A method for processing an imagewise exposed color photog.

material comprising a support having on at least one surface thereof at least one layer contg. a light-sensitive silver halide emulsion and a non-diffusing oil-sol. coupler capable of forming a dye by coupling with the oxidn. product of an arom. primary amine developing agent, wherein the color photog. material contains at least one member selected from the group consisting of cyan couplers represented by the general formulas I. and II [Za and Zb each represents -C(R3) = or -N= provided that one of Za and Zb is -N= and the other is -C(R3)=; R1 and R2 each represents an electron-attracting group having a Hammett's substituent const. .sigma.p value of at least 0.20 and the sum of .sigma.p values for R1 and R2 is at least 0.65; R3 represents a H atom or a substituent; X represents a H atom or a group which is eliminated on coupling with the oxidn. product of an arom. primary amine color developing agent; and R1, R2, R3, or X may be a bivalent group and the compd. may be in the form of a dimer or a higher polymer through the bivalent group or may form a homopolymer or a copolymer wherein the compd. is bonded to a high-mol. wt. chain] as the oil-sol. coupler and wherein the processing comprises color developing the photog. material and then processing the photog. material in a bath having a fixing ability and contg. at least one compd., as a fixing agent, selected from N-contq. compds.

IT 150982-36-8

(cyan **photog**. coupler)

RN 150982-36-8 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid,
2-[2-[2-[2,4-bis(1,1-dimethylpropyl)phenoxy]-1oxobutyl]amino]phenyl]-5-[[2-butoxy-5-(1,1,3,3tetramethylbutyl)phenyl]thio]-6-cyano-, 1-methylethyl ester (9CI)
(CA INDEX NAME)

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- IC ICM G03C007-38 ICS G03C007-42
- CC **74-2** (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
- ST color silver halide photog material; processing color photog material fixing; cyan photog coupler pyrrolotriazole deriv
- IT Photographic emulsions

(color, contg. pyrrolotriazole cyan dye formers)

IT **Photographic** couplers (cyan, pyrrolotriazoles as, for **photog**. materials with

```
improved processability)
                   146822-53-9
IT
     143779-39-9
                                 150982-35-7 150982-36-8
     151019-66-8
                   154217-48-8
        (cyan photog. coupler)
IT
     61607-68-9
        (photog. fixing solns. contq.)
IT
     130367-21-4P
                    143324-20-3P
                                   143324-21-4P
                                                  143324-22-5P
     150982-32-4P
                    150982-34-6P
                                   152586-70-4P
                                                  152586-71-5P
     152586-72-6P
                    152586-73-7P
        (prepn. and reaction of, in prepg. cyan photog.
        coupler)
     154217-50-2P
                    154217-51-3P
IT
        (prepn. and reaction of, in prepg. yellow photog.
        coupler)
IT
     143324-37-2P
                    143779-40-2P
        (prepn. and use of, as cyan photog. coupler)
IT
     153504-55-3P
                    153504-59-7P
        (prepn. and use of, as yellow photog. coupler)
IT
               99067-72-8 109871-03-6
                                          125666-25-3,
     70-23-5
     1H-Pyrrole-3,4-dicarbonitrile
                                     140859-54-7
                                                   152586-69-1
        (reaction of, in prepg. cyan photog. coupler)
IT
                154217-49-9
                              154217-52-4
        (reaction of, in prepg. yellow photog. coupler)
ΙT
     147495-63-4
        (yellow photog. coupler)
     ANSWER 28 OF 39 HCA COPYRIGHT 2005 ACS on STN
120:257293 Silver halide color photographic
     material. Naruse, Hideaki; Suzuki, Makoto; Sato, Takehiko (Fuji
     Photo Film Co., Ltd., Japan). Eur. Pat. Appl. EP 544319 Al
                       DESIGNATED STATES: R: DE, FR, GB, NL.
     19930602, 155 pp.
     (English).
                CODEN: EPXXDW.
                                APPLICATION: EP 1992-120291 19921127.
     PRIORITY: JP 1991-335917 19911127.
GI
     For diagram(s), see printed CA Issue.
AB
     A Ag halide color photog. material
     which provides good color developability and excellent color
     reproducibility in every hue comprises .gtoreq.1 cyan dye-forming
     emulsion layer, a magenta dye-forming emulsion layer, and a yellow
     dye-forming emulsion layer, wherein the cyan dye-forming emulsion
     layer contains .gtoreq.1 cyan coupler selected from a group of
     compds. represented by the formulas I and II (Za, Zb = CR3 or N
    provided that 1 of Za and Zb is N, the other is CR3; R1, R2 = an
     electron-attracting group having a Hammett's substituent const.
     .sigma.p of .gtoreq.20.65; R3 = H or a substituent group; X1 = H or
     a group capable of splitting off upon reaction with an oxidized
     arom. primary amine color developing agent) which may be a part of a
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polymer or copolymer. The yellow dye-forming layer contains groreq.1 yellow coupler selected from a group of compds.

represented by the formulas III and IV (R4 = a monovalent group excluding H; Q = nonmetallic atoms necessary to form a 3-5-membered hydrocarbon ring or a 3-5-membered heterocyclic ring contg. .gtoreq.1 hetero atom selected from N, S, O, and P; R5 = H, halogen, alkoxy, aryloxy, alkyl, or amino; X2 = H or a group capable of splitting off upon reaction with an oxidized arom. primary amine color developing agent; r = an integer of 0-4; R6, R8-10 = a substituent group; R1 = halogen or alkoxy; X3 = V or NR11R12; R11 = alkyl; R12 = alkyl or aryl; Zc = a group capable of splitting off upon reaction with an oxidized arom. primary amine color developing agent; Y = alkoxy carbonyl, sulfamoyl etc.; p = 0-2; m = 0-3; n = 0-4).

IT 146822-40-4 150982-36-8

(photog. cyan coupler)

RN 146822-40-4 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-6-carboxylic acid,
5-[[2-butoxy-5-(1,1,3,3-tetramethylbutyl)phenyl]thio]-7-cyano-2-[3[[[2-(octyloxy)-5-[[[2-(octyloxy)-5-(1,1,3,3tetramethylbutyl)phenyl]sulfonyl]amino]phenyl]sulfonyl]amino]phenyl], methyl ester (9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{Me} \\ \text{C-CH}_2\text{-CMe}_3 \\ \text{Me} \\ \text{O} \\ \text{S} \\ \text{MeO-C} \\ \text{N} \\ \text{O} \\ \text{N} \\ \text{N} \\ \text{O} \\ \text{N} \\ \text{O} \\ \text{N} \\ \text{O} \\ \text{O} \\ \text{O} \\ \text{C} \\ \text{CH}_2) \\ \text{7} \\ \text{-Me} \\ \text{O} \\ \text{Me} \\ \text{C} \\ \text{C} \\ \text{C} \\ \text{C} \\ \text{C} \\ \text{Me} \\ \text{O} \\ \text{Me} \\ \text{C} \\ \text{C} \\ \text{C} \\ \text{C} \\ \text{Me} \\ \text{Me} \\ \text{O} \\$$

RN 150982-36-8 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid,
2-[2-[2-[2,4-bis(1,1-dimethylpropyl)phenoxy]-1oxobutyl]amino]phenyl]-5-[[2-butoxy-5-(1,1,3,3tetramethylbutyl)phenyl]thio]-6-cyano-, 1-methylethyl ester (9CI)
(CA INDEX NAME)

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IC ICM G03C007-32

ICS G03C007-36; G03C007-38

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 41

ST silver halide color photog material; pyrrolotriazole cyan coupler color photog; acetanilide yellow coupler color photog

IT Photographic emulsions

(with improved color developability and reproducibility)

IT Photographic couplers (cyan, pyrrolotriazoles as, for forming forming dye

images with improved color developability and
reproducibility)

IT **Photographic** couplers

(yellow, acetanilides as, for forming dye **images** with improved color developability and reproducibility)

IT **146822-40-4 150982-36-8** 150982-38-0

151651-64-8

(photog. cyan coupler)

IT 147272-03-5 147495-61-2 147913-68-6 148027-88-7 154444-46-9 154444-47-0

(photog. yellow coupler)

IT 130367-21-4P 143324-20-3P 143324-21-4P 143324-22-5P 150982-32-4P 150982-34-6P 152586-70-4P 152586-71-5P (prepn. and reaction of, in prepg. photog. cyan coupler)

IT 143324-37-2P 143779-40-2P

(prepn. and use of, as photog. cyan coupler)

IT 146133-03-1P

(prepn. and use of, as **photog**. yellow coupler)

IT 70-23-5 109871-03-6 140859-54-7 152586-69-1 (reaction of, in prepg. **photog.** cyan coupler)

IT 496-15-1 695-53-4 146921-97-3 (reaction of, in prepg. **photog.** yellow coupler)

L66 ANSWER 29 OF 39 HCA COPYRIGHT 2005 ACS on STN

120:231867 Silver halide color photographic

material. Mihayashi, Keiji; Shimada, Yasuhiro (Fuji Photo Film Co., Ltd., Japan). Eur. Pat. Appl. EP 574948 A1 19931222, 122 pp. DESIGNATED STATES: R: BE, DE, FR, GB, NL. (English). CODEN: EPXXDW. APPLICATION: EP 1993-109804 19930618. PRIORITY: JP 1992-184717 19920619.

GI

Disclosed is a silver halide color photog. material wherein a photosensitive silver halide emulsion layer contains a silver halide emulsion which is comprised of tabular grains. The grains have an aspect ratio at least 2 account for at least 50% of the total no. of silver halide grains. The emulsion layer or the layer adjacent thereto also contains a cyan coupler represented by formula I (Z1 = NH or CHR3; Z2, Z3 = CR4 or N; R1-3 = an electron-withdrawing group of which the Hammett substituent group const. .sigma.p value is .gtoreq.0.2; R4 = H or a substituent group; X = H or a group which can be eliminated upon coupling reaction with an oxidized primary arom. amine color developing agent).

IT 154021-61-1

(cyan photog. coupler)

RN 154021-61-1 HCA

CN 1H-Pyrrolo[2,1-c]-1,2,4-triazole-7-carboxylic acid,
3-[3-[4-(acetylamino)phenyl]propyl]-5-[[2-butoxy-5-(1,1,3,3-tetramethylbutyl)phenyl]thio]-6-cyano-, 3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctyl ester (9CI) (CA INDEX NAME)

Me
$$C-CH_2-CH_2-CH_2-CH_2-CH_2-CH_2-CH_3$$

Me $C-CH_2-CH_2-CH_2-CH_2-CH_3$

Me $C-CH_2-CH_2-CH_3-CH_3$

Me $C-CH_3-CH_3-CH_3$

Me $C-CH_3-CH_3-CH_3$

Me $C-CH_3-CH_3-CH_3$

Me $C-CH_3-CH_3$

No $C-CH_3$

IC ICM G03C007-38

ICS G03C007-30

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

ST **silver halide** color **photog** material; pyrrolopyrazole cyan **photog** coupler

IT Photographic emulsions

(color, contg. tabular silver halide grains and pyrrolopyrazole cyan dye formers)

IT Photographic couplers

(cyan, pyrrolopyrazoles as)

IT 152828-30-3 154021-48-4 154021-49-5 154021-50-8 154021-51-9 154021-52-0 154021-53-1 154021-54-2 154021-55-3 154021-56-4

154021-57-5 154021-58-6 154021-59-7 154021-60-0 154021-61-1 154021-62-2 154021-63-3 154021-64-4 154021-65-5 154021-66-6

(cyan **photog**. coupler)

IT 146822-29-9P 151019-75-9P 151019-76-0P (prepn. and reaction of, in prepg. cyan photog. coupler)

IT 151019-65-7P

(prepn. and use of, as cyan photog. coupler)

IT 2905-62-6 2425-77-6 154021-47-3 (reaction of, in prepg. cyan photog. coupler)

L66 ANSWER 30 OF 39 HCA COPYRIGHT 2005 ACS on STN 120:231845 Method for processing silver halide color photographic material. Nakamura, Koichi; Taniguchi, Masato (Fuji Photo Film Co Ltd, Japan). Jpn. Kokai Tokkyo Koho JP 05224376 A2 19930903 Heisei, 67 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1992-59123 19920214.

GI

$$H_2N$$
 R^3
 NR^1
 R^2OH
 R^3

AB In the title method, the title material contains one or more cyan dye-forming couplers (Markush structures given). The title material is treated with phenylenediamine I [R1 = alkyl, hydroxyalkyl; R2 = alkylene, etc.; R3 = H, alkyl, alkoxy]. II is an example of said couplers. The title method gives high quality images.

ΙI

ΙT 150982-36-8

(photog. coupler)

RN 150982-36-8 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, 2-[2-[[2-[2,4-bis(1,1-dimethylpropyl)phenoxy]-1oxobutyl]amino]phenyl]-5-[[2-butoxy-5-(1,1,3,3tetramethylbutyl)phenyl]thio]-6-cyano-, 1-methylethyl ester (9CI) (CA INDEX NAME)

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- IC ICM G03C007-413 ICS G03C007-38
- CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
 Section cross-reference(s): 41
- ST pyrroloazole photog cyan coupler; phenylenediamine photog developing agent; high quality image photog processing

IT Photographic processing

(phenylenediamine deriv. in improved method for)

IT Photographic couplers

(cyan, pyrroloazoles as)

IT 150982-35-7 **150982-36-8** 151019-64-6 151019-66-8

(photog. coupler)

IT 107885-42-7 131254-40-5 142644-91-5 144337-76-8 146883-82-1 154048-67-6

(**photog.** developing agent)

IT 143324-37-2P 143779-40-2P

(prepn. of, as photog. coupler)

L66 ANSWER 31 OF 39 HCA COPYRIGHT 2005 ACS on STN

120:204437 Silver halide color photographic

material. Suzuki, Makoto; Naruse, Hideaki; Sato, Takehiko (Fuji Photo Film Co., Ltd., Japan). Eur. Pat. Appl. EP 544323 A1 19930602, 73 pp. DESIGNATED STATES: R: DE, FR, GB, NL. (English). CODEN: EPXXDW. APPLICATION: EP 1992-120296 19921127.

PRIORITY: JP 1991-311213 19911127.

GI

AB A Ag halide color photog. material

capable of providing a dye image having improved spectral absorption characteristics and color fastness comprises .gtoreq.1 Ag halide emulsion layer contg. .gtoreq.1 cyan coupler represented by the formula I or II (Za, Zb = N or CR3 provided that 1 of Za and Zb is N and the other is CR3; R1, R2 = an electron-attracting group having a Hammett's substituent const. .sigma.p .gtoreq.0.2 with the sum of the .sigma.p values of R1 and R2 being .gtoreq.0.65; R3 = H or a substituent group; X = H or a group capable of splitting off upon reaction with the oxidn. product of an arom. primary amine color developing agent) and .gtoreq.1 sparingly water-sol. homopolymer and/or copolymer.

IT 143324-39-4 150982-36-8

(photog. cyan coupler)

RN 143324-39-4 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-6-carboxylic acid, 5-[[2-butoxy-5-(1,1,3,3-tetramethylbutyl)phenyl]thio]-7-cyano-2-[3[[[5-[[[5-octyl-2-(octyloxy)phenyl]sulfonyl]amino]-2(octyloxy)phenyl]sulfonyl]amino]phenyl]-, methyl ester (9CI) (CA
INDEX NAME)

Me
$$C-CH_2-CMe_3$$
 $MeO-C$
 $NH-S$
 $NH-S$

RN 150982-36-8 HCA
CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid,
2-[2-[[2-[2,4-bis(1,1-dimethylpropyl)phenoxy]-1oxobutyl]amino]phenyl]-5-[[2-butoxy-5-(1,1,3,3tetramethylbutyl)phenyl]thio]-6-cyano-, 1-methylethyl ester (9CI)
(CA INDEX NAME)

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IC ICM G03C007-30
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CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

ST silver halide color photog material; pyrazoloazole cyan photog coupler

IT Photographic emulsions

(color, contg. pyrazoloazole cyan color formers and sparingly water-sol. polymers)

IT 143324-39-4 150982-35-7 150982-36-8

151019-66-8 151651-64-8 152793-67-4 153273-54-2 153273-55-3 (photog. cyan coupler)

IT 143324-20-3P 143324-22-5P 150982-32-4P 152586-71-5P

152586-72-6P 152586-73-7P 153273-56-4P 153273-57-5P (prepn. and reaction of, in prepg. **photog.** cyan

coupler)

IT 143779-40-2P 153273-52-0P

(prepn. and use of, as photog. cyan coupler)

IT 105-36-2 99067-72-8 109871-03-6 125666-25-3,

1H-Pyrrole-3,4-dicarbonitrile 130367-21-4 140859-54-7

152586-69-1 152586-70-4

(reaction of, in prepg. photog. cyan coupler)

IT 9011-14-7, Poly(methylmethacrylate) 25267-41-8,

Poly(N-tert-butylacrylamide) 28549-51-1, tert-Butylmethacrylate-

methylmethacrylate copolymer 32760-09-1, Poly(N-tert-

butylmethacrylamide) 65993-04-6, Poly(N-butylacrylamide)

(silver halide color photog.

materials contg. pyrazoloazole cyan couplers and)

L66 ANSWER 32 OF 39 HCA COPYRIGHT 2005 ACS on STN 120:178099 Method for processing silver halide color photographic material. Ishikawa, Takatoshi; Yoshioka,

Yasuhiro (Fuji Photo Film Co Ltd, Japan). Jpn. Kokai Tokkyo Koho JP 05158202 A2 19930625 Heisei, 68 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1991-349903 19911210.

GI

AB An exposed silver halide color photog.

material contg. at least one pyrroloazole cyan color-forming coupler (I and II; one of Za, Zb = CR3 and the other = N; R3 = H, substituent; R1, R2 = electron withdrawing group having a Hammett const. .sigma.p .gtoreq.0.20, provided that the sum of .sigma.p values of R1 and R2 is .gtoreq.0.65; X = H, group capable of leaving upon coupling with the oxidized form of an arom primary amine color developing agent; R1 - R3 or X may be a bivalent group and form a homopolymer or copolymer with dimer, higher oligomers, or a polymer chain) is processed by color development using a color developer contg. Cl- at .gtoreq.0.08 mol/L followed by desilverization. said color photog. material contains a high AgCl -content emulsion with Cl- content .qtoreq.90 mol%. In rapid processing, this photog. processing shows little fluctuation of photog. properties (e.g sensitivity), maintains stable photog. properties at high Cl-concn. in a developer, and provides sufficient coloration (high max. d.) and little fog in contamination of a color developer with a bleach-fixing soln.

IT 153575-64-5

(cyan **photog.** coupler, color **photog.** material contg., for rapid processing)

RN 153575-64-5 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, 2-[2-chloro-5-[[[2-(octyloxy)-4-(1,1,3,3tetramethylbutyl)phenyl]sulfonyl]amino]phenyl]-6-cyano-5-[[2-[[(diethylamino)carbonyl]amino]phenyl]thio]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

IC ICM G03C007-407

ICS G03C001-015; G03C001-035; G03C001-08; G03C007-38

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

ST color **photog** rapid processing; pyrroloazole cyan coupler color **photog** material; chloride ion concn color **photog** developer

IT Photographic paper

(color, contg. contg. pyrroloazole cyan coupler and high silver halide-content emulsion, for stable photog. property, reduced fog, and high coloration in rapid processing)

IT Photographic developers

(color, contq. high chloride ion concn., in rapid processing)

IT Photographic processing

(color, rapid, of color photog. material contg. pyrroloazole cyan coupler and high silver halide-content emulsion, for stable photog.

property, reduced fog, and high coloration)

IT 150982-35-7 **153575-64-5**

(cyan photog. coupler, color photog. material contg., for rapid processing)

IT 143324-37-2P 153575-67-8P

(prepn. of, as cyan photog. coupler, color photog. material contg., for rapid processing)

IT 143324-20-3P 143324-21-4P 143324-22-5P 150982-32-4P

150982-34-6P 153575-65-6P

(prepn. of, as intermediate for pyrroloazole cyan photog
. coupler)

L66 ANSWER 33 OF 39 HCA COPYRIGHT 2005 ACS on STN

120:148778 Silver halide color photographic

material. Naruse, Hideaki; Suzuki, Makoto (Fuji Photo Film Co., Ltd., Japan). Eur. Pat. Appl. EP 544322 A1 19930602, 88

pp. DESIGNATED STATES: R: DE, FR, GB, NL. (English). CODEN: EPXXDW. APPLICATION: EP 1992-120295 19921127. PRIORITY: JP 1991-335905 19911127.

GI

A Ag halide color photog. material ABcapable of providing a dye image having excellent color reproducibility, less color fading, and good balance of cyan, magenta, and yellow colors comprises a support and provided thereon cyan coupler-, magenta coupler-, and yellow coupler-contg. Ag halide emulsion layers, wherein the cyan coupler-contq. Aq halide emulsion layer contains .gtoreq.1 cyan coupler selected from the group of compds. represented by the formulas I and II (Za, Zb = CR3 or N, provided that one of Za and Zb is N and the other is CR3; R1, R2 = an electron-attracting group having a Hammett's substituent const. .sigma.p of .gtoreq.0.2 and the sum of the .sigma.p values of R1 and R2 is .gtoreq.0.65; R3 = H or a substituent group; X = H or a group capable of splitting off upon reaction with an oxidized arom. primary amine color developing agent) which may be a part of a polymer or copolymer and the magenta coupler-contq. Ag halide emulsion layer contains a magenta coupler represented by the formula III (R4 = H or a substituent group; Z = a group of nonmetallic atoms necessary to form a 5-membered azole ring contg. 2-3 N atoms; X1 = H or a group capable of splitting off upon reaction with an oxidized arom. primary amine color developing agent).

150982-36-8 150982-37-9

IT

(photog. cyan coupler, for forming dye images having excellent color reproducibility and reduced color fading)

RN 150982-36-8 HCA

CN

1H-Pyrrolo[1,2-b] [1,2,4]triazole-7-carboxylic acid, 2-[2-[2-[2,4-bis(1,1-dimethylpropyl)phenoxy]-1oxobutyl]amino]phenyl]-5-[[2-butoxy-5-(1,1,3,3tetramethylbutyl)phenyl]thio]-6-cyano-, 1-methylethyl ester (9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 2-A

RN 150982-37-9 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid,

2-[3-[[2-[2,4-bis(1,1-dimethylpropyl)phenoxy]-1-oxobutyl]amino]phenyl]-5-[[2-butoxy-5-(1,1,3,3-tetramethylbutyl)phenyl]thio]-6-cyano-, 1-methylethyl ester (9CI) (CA INDEX NAME)

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IC ICM G03C007-32
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CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

ST silver halide color photog material; pyrrolotriazole cyan coupler color photog; pyrazoloazole magenta coupler color photog

IT Photographic emulsions

(for forming dye images having excellent color reproducibility and reduced color fading)

IT Photographic couplers

(cyan, pyrrolotriazoles as)

IT Photographic couplers

(magenta, pyrazoloazoles as)

IT 143324-24-7 143779-35-5 143779-39-9 143795-04-4 150982-36-8 150982-37-9 . 151019-64-6 151019-65-7 151019-66-8 152793-66-3 152793-67-4 152793-68-5 152793-69-6 152793-70-9 152793-71-0 152793-72-1 152793-73-2 152793-74-3 152793-75-4

(photog. cyan coupler, for forming dye images

having excellent color reproducibility and reduced color fading) IT 111244-17-8 124351-77-5 133000-75-6 149311-40-0 149311-41-1 149311-42-2 151288-35-6 152793-76-5 152793-77-6 152793-78-7 152793-79-8 152793-80-1 152793-81-2 152793-82-3 152793-83-4 152793-84-5 152793-85-6 152793-86-7 152793-87-8 152793-88-9 152793-89-0 152793-90-3 152793-91-4

(photog. magenta coupler, for forming dye images having excellent color reproducibility and reduced color fading)

IT 130367-21-4P 143324-20-3P 143324-21-4P 143324-22-5P 150982-32-4P 150982-33-5P 150982-34-6P 152586-70-4P

150982-32-4P 150982-33-5P 150 152586-72-6P 152586-73-7P

(prepn. and reaction of, in prepg. photog. cyan coupler)

IT 143324-37-2P 143779-40-2P

(prepn. and use of, as **photog.** cyan coupler for forming dye **images** having excellent color reproducibility and reduced color fading)

IT 70-23-5 99067-72-8 109871-03-6 125666-25-3, 1H-Pyrrole-3,4-dicarbonitrile 140859-54-7 152586-69-1 (reaction of, in prepg. photog. cyan couplers)

L66 ANSWER 34 OF 39 HCA COPYRIGHT 2005 ACS on STN

120:120583 Silver halide color photographic

material. Seto, Nobuo; Yoshioka, Yasuhiro; Suzuki, Makoto; Morigaki, Masakazu (Fuji Photo Film Co., Ltd., Japan). Eur. Pat Appl. EP 544316 Al 19930602, 109 pp. DESIGNATED STATES: R: DE, FR, GB, NL. (English). CODEN: EPXXDW. APPLICATION: EP 1992-120281 19921127. PRIORITY: JP 1991-335851 19911127.

GI

AB Ag halide color photog. material having improved color-forming property, color reproducibility, and image stability comprises a support having provided thereon .gtoreq.1 Ag halide emulsion layer contg. a cyan coupler represented by the formula I or II (Za, Zb = CR3 or N, provided that one of Za and Zb is N and the other is CR3; R1, R2 = an electron-attracting group having a Hammett's substituent const. .sigma.p of .gtoreq.0.20 and the sum of the .sigma.p values of R1 and R2 is .gtoreq.0.65; R3 = H or a substituent group; X = H or a group capable of splitting off upon reaction with an oxidized arom. primary amine color developing agent) which may be a part of a

polymer or copolymer and a compd. represented by the formula III (R4 = an aliph., arom., or heterocyclic group, SiR10R11R12, COR13, SO2R14, P(O)n R15R16; R5-9 = H, Z2R4, an aliph., arom., heterocyclic, aliph. oxycarbonyl, or arom. oxycarbonyl group, halogen, acyl, sulfonyl, carbamoyl, sulfamoyl, nitro, sulfo, or carboxyl; Z1 = 0 or NR17; Z2 = 0, S, or NR17; R10-12 = an aliph., arom., aliph. oxy, or arom. oxy group; R13-14 = an aliph., arom., aliph. amino, or aliph. amino group; R15-16 = an aliph., arom., aliph. oxy, or arom. oxy group; n = 0 or 1; R17 = H or R4).

IT 150982-36-8

(photog. cyan coupler)

RN150982-36-8 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, 2-[2-[[2-[2,4-bis(1,1-dimethylpropyl)phenoxy]-1oxobutyl]amino]phenyl]-5-[[2-butoxy-5-(1,1,3,3tetramethylbutyl)phenyl]thio]-6-cyano-, 1-methylethyl ester (9CI) (CA INDEX NAME)

PAGE 1-A

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IC
     ICM G03C007-30
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CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

ST silver halide color photog material; pyrrolotriazole cyan coupler color photog; benzene deriv color **photog** material

IT Photographic emulsions

> (contg. benzene derivs. with improved color-forming property, color reproducibility, and image stability)

IT Photographic couplers

> (cyan, pyrrolotriazoles as, with improved color-forming property and color reproducibility)

IT 66259-60-7 75773-13-6 89929-65-7 98333-19-8 103815-67-4 108780-97-8 110126-86-8 116089-83-9 116090-11-0 123633-02-3 124079-79-4 132503-91-4 138268-70-9 138305-46-1 141290-51-9 150441-76-2 152586-74-8 147495-87-2 150440-56-5 152586-75-9 152586-76-0 152586-77-1 152586-78-2 (antifading agent, for silver halide color

photog. materials)

IT 143779-39-9 150982-35-7 **150982-36-8** 151019-64-6 151019-65-7 151019-67-9

(photog. cyan coupler)

IT 143324-21-4P 143324-20-3P 143324-22-5P 150982-32-4P 150982-34-6P 152586-71-5P 152586-72-6P 152586-73-7P

(prepn. and reaction of, in prepg. photog. cyan coupler)

IT 143324-37-2P 143779-40-2P

(prepn. and use of, as photog. cyan coupler)

IT 109871-03-6 70-23-5 99067-72-8 125666-25-3,

1H-Pyrrole-3,4-dicarbonitrile 130367-21-4 152586-69-1 152586-70-4

(reaction of, in prepg. photog. cyan coupler)

L66 ANSWER 35 OF 39 HCA COPYRIGHT 2005 ACS on STN

120:41889 Silver halide color photographic

material. Suzuki, Makoto; Takahashi, Osamu; Shimada, Yasuhiro; Matsuoka, Koushin; Yoshioka, Yasuhiro (Fuji Photo Film Co., Ltd., Japan). Eur. Pat. Appl. EP 545300 Al 19930609, 86 pp. DESIGNATED STATES: R: DE, FR, GB, NL. (English). CODEN: EPXXDW. APPLICATION: EP 1992-120280 19921127. PRIORITY: JP 1991-311212 19911127; JP 1991-335861 19911127; JP 1992-70002 19920221.

GI

NC
$$COR^{12}$$

NC COR^{12}

NH R^{22}

NH R^{21} I

NC $CO_2CR^{13}R^{23}R^{33}$

NH R^{43} III

The title material comprises .gtoreq.1 layer contg. a cyan coupler from I, II, and III [R11 = alkyl, alkoxy, aryl, aryloxy; R21, R22, R32, R43 = substituent; R12 = aliph., aryl, heterocyclyl, alkoxy, aryloxy, acylamino, heterocyclic amino, heterocyclic oxy; p = 0-4; R13, R23, R33 = H, substituent provided that the total of Taft's substituent const. .sigma. value of all of them is .gtoreq.1.5; X1-X3 = H, group capable of splitting off by a coupling reaction; all of the above groups may be divalent and form a dimer or higher (co)polymer]. The material forms a color image with good color hue and fastness. It is hardly fogged and the dyes formed from the coupler hardly assoc. with each other in the material.

IT 151019-77-1 151019-81-7 151019-82-8 151019-83-9 151019-88-4 151019-90-8

(photog. cyan coupler)

RN 151019-77-1 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, 2-[3-[[2-[2,4-bis(1,1-dimethylpropyl)phenoxy]-1-oxobutyl]amino]phenyl]-5-[[2-butoxy-5-(1,1,3,3-trimethylbutyl)phenyl]thio]-6-cyano-, 5,7,7-trimethyl-2-(1,3,3-trimethylbutyl)octyl ester (9CI) (CA INDEX NAME)

PAGE 1-A

$$\begin{array}{c} \text{Me} \\ \text{NC} \\$$

PAGE 1-B

RN 151019-81-7 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid,
5-[[2-(acetylamino)phenyl]thio]-6-cyano-2-[2-[[[2-[2-(hexyloxy)ethoxy]-5-(1,1,3,3-tetramethylbutyl)phenyl]sulfonyl]amino]
phenyl]-, 2-(diethylamino)-2-oxoethyl ester (9CI) (CA INDEX NAME)

RN 151019-82-8 HCA
CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid,
5-[[2-(benzoylamino)phenyl]thio]-2-[5-[[2-[2,4-bis(1,1-dimethylpropyl)phenoxy]-1-oxooctyl]amino]-2-methoxyphenyl]-6-cyano-,

2-methoxy-2-oxoethyl ester (9CI) (CA INDEX NAME)

RN 151019-83-9 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, 2-[2-[2-[2,4-bis(1,1-dimethylpropyl)phenoxy]-1oxobutyl]amino]phenyl]-5-[[2-butoxy-5-(1,1,3,3tetramethylbutyl)phenyl]thio]-6-cyano-, 2-ethoxyethyl ester (9CI) (CA INDEX NAME)

PAGE 1-A

$$\begin{array}{c|c} & \text{Me} \\ & \text{Me}_3\text{C--CH}_2\text{--}\text{C} \\ & \text{Me} \\ & \text{OBu-n} \\ & \text{NC} \\ & \text$$

PAGE 2-A

RN 151019-88-4 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, 6-cyano-2-[4-[[[2-(octyloxy)-5-(1,1,3,3tetramethylbutyl)phenyl]sulfonyl]amino]phenyl]-5-[[2-(phenoxycarbonyl)phenyl]thio]-, 2-butoxy-2-oxoethyl ester (9CI) (CA INDEX NAME)

RN 151019-90-8 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, 2-[4-[[2-[2,4-bis(1,1-dimethylpropyl)phenoxy]-1-oxobutyl]amino]phenyl]-5-[[2-butoxy-5-(1,1,3,3-tetramethylbutyl)phenyl]thio]-6-cyano-, 2-oxo-2-(phenylamino)ethylester (9CI) (CA INDEX NAME)

IC ICM G03C007-38

ICS G03C001-83

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 41

ST cyan coupler photog film

IT Photographic couplers

(cyan, for good hue and color fastness)

IT 146822-43-7 146822-52-8 **151019-77-1** 151019-78-2

151019-79-3 151019-80-6 **151019-81-7 151019-82-8**

151019-83-9 151019-84-0 151019-85-1 151019-86-2

151019-87-3 **151019-88-4** 151019-89-5 **151019-90-8**

151019-91-9 151019-92-0 151019-93-1 151019-94-2 151839-67-7

151865-62-2

(photog. cyan coupler)

IT 146822-29-9P 151019-75-9P 151019-76-0P 151839-64-4P

151839-65-5P 151839-66-6P

(prepn. and reaction of, photog. cyan coupler from)

IT 146822-51-7P 146822-53-9P 151019-65-7P 151865-61-1P

(prepn. and use of, as photog. cyan coupler)

L66 ANSWER 36 OF 39 HCA COPYRIGHT 2005 ACS on STN

120:19164 Silver halide color photographic

material. Morigaki, Masakazu; Yoshioka, Yasuhiro; Seto, Nobuo (Fuji Photo Film Co., Ltd., Japan). Eur. Pat. Appl. EP 545305 A1

19930609, 97 pp. DESIGNATED STATES: R: DE, FR, GB, NL.

(English). CODEN: EPXXDW. APPLICATION: EP 1992-120294 19921127.

PRIORITY: JP 1991-335820 19911127.

GI

The title material comprises .gtoreq.1 pyrrolotriazole cyan coupler I [one of Z1, Z2 is -C(R3): and the other one is -N:; R1, R2 = electron attractive group having a Hammett's const. .rho.p value of .gtoreq.0.2 and the sum of the .rho.p values of R1 and R2 is .gtoreq.0.65; R3 = H, substituent; X = H, group that can be eliminated by a coupling reaction with the oxidant of a color developer; optionally R1-R3 and X may be a bivalent group which forms a dimer or polymer; R2 and X can interchange their positions]. The material also contains .gtoreq.1 lipophilic compd. selected from phenolic compds., S peroxide compds., and amides claimed by 3 Markush structures. The photog. material has improved storage stability and color developability and the cyan coupler

produces fast color.

IT 146822-40-4 150982-36-8 (photog. cyan coupler)

RN 146822-40-4 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-6-carboxylic acid,
5-[[2-butoxy-5-(1,1,3,3-tetramethylbutyl)phenyl]thio]-7-cyano-2-[3[[[2-(octyloxy)-5-[[[2-(octyloxy)-5-(1,1,3,3tetramethylbutyl)phenyl]sulfonyl]amino]phenyl]sulfonyl]amino]phenyl], methyl ester (9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{Me} \\ \text{C-CH}_2\text{-CMe}_3 \\ \text{Me} \\ \text{O} \\ \text{S} \\ \text{MeO-C} \\ \text{N} \\ \text{N$$

RN 150982-36-8 HCA
CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid,
2-[2-[2-[2,4-bis(1,1-dimethylpropyl)phenoxy]-1oxobutyl]amino]phenyl]-5-[[2-butoxy-5-(1,1,3,3tetramethylbutyl)phenyl]thio]-6-cyano-, 1-methylethyl ester (9CI)

(CA INDEX NAME)

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PAGE 2-A

IC ICM G03C007-30

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 41

ST cyan coupler **photog**; lipophilic compd phenol sulfur peroxide amide; **photog** paper lipophilic compd

IT Photographic paper

(color, lipophilic compds. and cyan couplers for)

IT Photographic couplers

(cyan, pyrrolotriazole, for fast color)

IT 85-60-9 119-47-1 123-28-4 991-84-4 2082-79-3 2469-45-6

3127-14-8 7335-03-7 23873-36-1 31994-60-2 33145-10-7 35439-93-1 36437-37-3 40278-59-9 41484-35-9 41556-26-7 63941-39-9 65894-72-6 71067-09-9 76434-12-3 83044-89-7 85238-64-8 87667-27-4 89131-33-9 89829-20-9 104541-32-4 106135-09-5 115054-41-6 118410-88-1 125051-31-2 133711-54-3 135122-76-8 141975-49-7 143223-13-6 148725-98-8 148725-99-9 150441-79-5 151019-68-0 151019-69-1 151019-71-5 151019-72-6 151019-73-7 151019-74-8 151865-63-3 (lipophilic compd., in photog. emulsion) 143779-39-9 **146822-40-4** 150982-35-7 150982-36-8 151019-64-6 151019-65-7 151019-66-8 151019-67-9 (photog. cyan coupler) 143324-20-3P 143324-21-4P 143324-22-5P 150982-32-4P 150982-33-5P 150982-34-6P (prepn. and reaction of, photog. cyan coupler from) 143324-37-2P 143779-40-2P

L66 ANSWER 37 OF 39 HCA COPYRIGHT 2005 ACS on STN

119:282104 Silver halide color photographic
material. Naruse, Hideaki; Suzuki, Makoto; Sato, Takehiko (Fuji Photo Film Co., Ltd., Japan). Eur. Pat. Appl. EP 545301 A1

19930609, 96 pp. DESIGNATED STATES: R: DE, FR, GB, NL.
(English). CODEN: EPXXDW. APPLICATION: EP 1992-120283 19921127.
PRIORITY: JP 1991-335892 19911127.

(prepn. and use of, as photog. cyan coupler)

GI

IT

IT

IT

$$R^{1}$$
 X
 R^{2}
 X
 R^{2}
 X
 R^{2}
 X
 $R^{4}COCH(X^{1})CONH$
 R^{5}
 R^{5}
 R^{1}
 R^{6}

The title material comprises .gtoreq.1 pyrrolotriazole cyan coupler I [one of Z1, Z2 is CR3 and the other one is N; R1, R2 = electron-attractive group having Hammett's substituent const. (.sigma.) value .gtoreq.0.2 and the sum of the .sigma. values of R1 and R2 is .gtoreq.0.65; R3 = H, substituent; X = H, group which can be eliminated upon coupling reaction; X and R2 can switch their locations; optionally R1-R3 or X may be bivalent group which forms dimer or polymer through the group or a homopolymer or copolymer through a high mol. wt. chain]. The material also comprises .gtoreq.1 yellow coupler from II [R4 = tertiary alkyl, aryl; R5 = F,

alkyl, aryl, alkoxy, aryloxy, dialkylamino, alkylthio, arylthio; L = 0, CO2, NHCO, etc.; R6 = halogen, alkyl, aryl, alkoxy, aryloxy, aralkyl, alkoxyaryl, alkylaryloxy, arylalkoxy; X1 = X]. The **photog.** material is capable of providing **images** having improved spectral absorption characteristics, excellent color reproducibility, and yet a sufficiently low min. d.

IT 146822-40-4 150982-36-8 150982-37-9 (photog. cyan coupler)

RN 146822-40-4 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-6-carboxylic acid,
5-[[2-butoxy-5-(1,1,3,3-tetramethylbutyl)phenyl]thio]-7-cyano-2-[3[[[2-(octyloxy)-5-[[[2-(octyloxy)-5-(1,1,3,3tetramethylbutyl)phenyl]sulfonyl]amino]phenyl]sulfonyl]amino]phenyl], methyl ester (9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{Me} \\ \text{C-CH}_2\text{-CMe}_3 \\ \text{MeO-C} \\ \text{MeO-C} \\ \text{NC} \\ \text{NH} \\ \text{NH} \\ \text{O} \\ \text{NC} \\ \text{Me-(CH}_2)_7\text{-O} \\ \text{Me-C-CH}_2\text{-CMe}_3 \\ \text{Me} \\ \text{Me} \\ \text{NC} \\ \text{Me} \\ \text{NC} \\$$

RN 150982-36-8 HCA
CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid,
2-[2-[[2-[2,4-bis(1,1-dimethylpropyl)phenoxy]-1oxobutyl]amino]phenyl]-5-[[2-butoxy-5-(1,1,3,3tetramethylbutyl)phenyl]thio]-6-cyano-, 1-methylethyl ester (9CI)
(CA INDEX NAME)

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RN 150982-37-9 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid,
2-[3-[[2-[2,4-bis(1,1-dimethylpropyl)phenoxy]-1oxobutyl]amino]phenyl]-5-[[2-butoxy-5-(1,1,3,3tetramethylbutyl)phenyl]thio]-6-cyano-, 1-methylethyl ester (9CI)
(CA INDEX NAME)

IC ICM G03C007-32

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 41

ST cyan coupler **photog**; yellow coupler **photog**; **photog** paper coupler

IT Photographic paper

(color, yellow and cyan coupler combinations for)

IT Photographic couplers

(cyan, combinations of yellow and)

IT Photographic couplers

(yellow, combinations of cyan and)

IT 146822-40-4 150982-35-7 150982-36-8

150982-37-9 150982-38-0 151651-64-8

(photog. cyan coupler)

IT 135851-30-8 135851-32-0 135851-36-4 137320-46-8 142383-25-3

(photog. yellow coupler)

IT 143324-20-3P 143324-21-4P 143324-22-5P 150982-32-4P

150982-33-5P 150982-34-6P

(prepn. and reaction of, photog. cyan coupler from)

IT 143324-37-2P 143779-40-2P

(prepn. and use of, as photog. cyan coupler)

L66 ANSWER 38 OF 39 HCA COPYRIGHT 2005 ACS on STN

117:201795 Cyan coupler for silver halide color

photographic material. Suzuki, Makoto; Sato, Tadahisa;

Sato, Kozo; Ishii, Yoshio (Fuji Photo Film Co., Ltd., Japan). Eur.

Pat. Appl. EP 488248 A1 19920603, 82 pp. DESIGNATED

STATES: R: CH, DE, FR, GB, IT, LI, NL. (English). CODEN: EPXXDW.

APPLICATION: EP 1991-120319 19911127. PRIORITY: JP 1990-326218 19901128; JP 1991-236894 19910826.

GI

AB A Ag halide color photog. material is described comprising a pyrrolotriazole cyan coupler having the formula I or II [R1-R3 = H, a substituent, provided that .gtoreq.1 of R1-R3 is an electron-withdrawing group which has a Hammett's substituent const. .gtoreq.0.15; R1-R2 may form a ring; X = H, a substituent capable of being released upon coupling reaction; the coupler may form a dimer or a polymer]. The photog. material contg. the above coupler has improved image -forming property and color reproducibility.

IT 143779-42-4

(as **photog**. cyan coupler)

RN 143779-42-4 HCA

CN 1H-Pyrrolo[2,1-c]-1,2,4-triazole-6,7-dicarbonitrile, 5-[[2-butoxy-5-(1,1,3,3-tetramethylbutyl)phenyl]thio]-3-[3-[4-(octadecylamino)phenyl]propyl]- (9CI) (CA INDEX NAME)

Me
$$_{3}$$
C-CH $_{2}$ -C-Me NC NH- (CH $_{2}$) $_{17}$ -Me OBu-n

IC ICM G03C007-38

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 41

ST cyan coupler **photog** pyrrolotriazole deriv

IT Photographic couplers

(cyan, pyrrolotriazole-type)

IT 143779-24-2 143779-25-3 143779-26-4 143779-27-5 143779-28-6 143779-29-7 143779-30-0 143779-33-3 143779-34-4 143779-35-5 143779-36-6 143779-37-7 143779-39-9 143779-41-3 143779-38-8

143779-42-4 143795-03-3 143795-04-4

(as **photog**. cyan coupler)

IT 143779-43-5P 143779-44-6P 143779-45-7P 143779-46-8P 143779-47-9P 143779-48-0P 144082-59-7P 144082-60-0P (prepn. and reaction of, in prepg. photog. cyan coupler)

IT 143779-23-1P 143779-31-1P 143779-32-2P 143779-40-2P (prepn. and use of, as **photog**. cyan coupler)

1990-334786 19901130; JP 1991-226325 19910813.

L66 ANSWER 39 OF 39 HCA COPYRIGHT 2005 ACS on STN

117:160779 Cyan image forming method and silver
 halide color photographic material containing cyan
 coupler. Suzuki, Makoto; Sato, Tadahisa; Ishii, Yoshio; Naruse,
 Hideaki; Shimada, Yasuhiro; Sato, Kozo (Fuji Photo Film Co., Ltd.,
 Japan). Eur. Pat. Appl. EP 491197 A1 19920624, 87 pp.
 DESIGNATED STATES: R: CH, DE, FR, GB, IT, LI, NL. (English).
 CODEN: EPXXDW. APPLICATION: EP 1991-120433 19911128. PRIORITY: JP

GI

AB The title coupler are I or II [R1, R2 = electron withdrawing group having Hammett's substituent const. (.sigma.p) .gtoreq.0.2; R1-R2 may be bonded to form a ring; the sum of .sigma.p for R1 and R2 is .gtoreq.0.65; R3 = H, substituent; H, releasable group; the coupler may be in form of a dimer or polymer at R1-R3 or X]. An image forming method is also claimed. The coupler has improved color forming property, color reproducibility, and image preservability.

IT 143324-39-4 143324-42-9

(photog. cyan coupler from)

RN 143324-39-4 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-6-carboxylic acid,

5-[[2-butoxy-5-(1,1,3,3-tetramethylbutyl)phenyl]thio]-7-cyano-2-[3-[[[5-[[[5-octyl-2-(octyloxy)phenyl]sulfonyl]amino]-2-(octyloxy)phenyl]sulfonyl]amino]phenyl]-, methyl ester (9CI) (CA INDEX NAME)

Me
$$C-CH_2-CMe_3$$
 $MeO-C$
 $MeO-C$

RN 143324-42-9 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxamide, 5-[[2-butoxy-5-(1,1,3,3-tetramethylbutyl)phenyl]thio]-6-cyano-2-[3-[[[2-(octyloxy)-5-[[2-(octyloxy)-5-(1,1,3,3-tetramethylbutyl)phenyl]sulfonyl]amino]phenyl]sulfonyl]amino]phenyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{Me} \\ \text{C-CH}_2\text{-CMe}_3 \\ \text{Me} \\ \text{NC} \\ \text{NC} \\ \text{NC} \\ \text{NH} \\ \text{NH} \\ \text{NH} \\ \text{O} \\ \text{Me} \\ \text{CCH}_2\text{)}_7\text{-Me} \\ \text{Me} \\ \text{CCH}_2\text{)}_7\text{-O} \\ \text{Me} \\ \text{CCH}_2\text{-CMe}_3 \\ \text{CCH}_2\text{-CMe}_3 \\ \text{Me} \\ \text{CCH}_2\text{-CMe}_3 \\ \text{Me} \\ \text{CCH}_2\text{-CMe}_3 \\ \text{CCH}_2\text{$$

```
CC
     74-2 (Radiation Chemistry, Photochemistry, and
     Photographic and Other Reprographic Processes)
     Section cross-reference(s): 41
ST
     cyan coupler photog pyrrolotriazole
IT
     Photographic couplers
        (cyan, pyrrolotriazole)
IT
     143324-23-6
                   143324-24-7
                                 143324-25-8
                                                143324-26-9
                                                              143324-27-0
                                                143324-31-6
     143324-28-1
                   143324-29-2
                                 143324-30-5
                                                              143324-37-2
     143324-38-3 143324-39-4
                               143324-40-7
                                             143324-41-8
                   143324-43-0
                                 143324-44-1
                                                143324-45-2
     143324-42-9
        (photog. cyan coupler from)
IT
     143324-15-6P
                    143324-16-7P
                                   143324-17-8P
                                                   143324-18-9P
```

143324-19-0P 143324-20-3P 143324-21-4P 143324-22-5P (prepn. and reaction of, photog. cyan coupler from)
IT 143324-32-7P 143324-33-8P 143324-34-9P 143324-35-0P 143324-36-1P

(prepn. and use of, as **photog**. cyan coupler)

=> => d 167 10,20,30,40,50,60,70,80,90,100,110,120,130,140,150,152 cbib abs hitstr hitind

L67 ANSWER 10 OF 152 HCA COPYRIGHT 2005 ACS on STN

138:17994 Silver halide color photographic
paper showing excellent color reproduction by digital
imaging system. Soejima, Susumu; Yoneyama, Hiroyuki (Fuji
Photo Film Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 2002351027
A2 20021204, 69 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP
2001-154700 20010523.

AB After the color development process, the unexposed areas of the title photog. paper show reflection densities of .ltoreq.0.07, .ltoreq.0.09, and .ltoreq.0.07 at 450, 550, and 650 nm, resp., and the red-exposed areas of the photog. paper satisfy specified reflection d. relations and cyan max. d. The cyan color forming emulsion layer contains a specified cyan coupler. The photog. paper contains a specified pigment(s). The photog. paper, esp. suitable for digital colorproofs, shows excellent white background and color reproducibility.

IT 243844-33-9 405922-49-8

(cyan coupler in color **photog**. paper for showing excellent color reprodn. by digital **imaging** system)

RN 243844-33-9 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, 6-cyano-2-[4-(1,1-dimethylethyl)phenyl]-5-[(4-morpholinyloxy)carbonyl]-, 2,6-bis(1,1-dimethylethyl)-4-methylcyclohexyl ester (9CI) (CA INDEX NAME)

RN 405922-49-8 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid,
5-[[[bis(2-methoxy-2-oxoethyl)amino]carbonyl]oxy]-6-cyano-2-[3-(1,1-dimethylethyl)-5-methylphenyl]-, 2,6-bis(1,1-dimethylethyl)-4-methylcyclohexyl ester (9CI) (CA INDEX NAME)

IC ICM G03C007-20

ICS G03C007-00; G03C007-34; G03C007-38; G03C007-392

- CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
- ST silver halide color photog paper cyan coupler digital imaging
- IT Color photographic paper

Cyan couplers Graphic arts

(color **photog.** paper contg. specified cyan coupler for showing excellent color reprodn. by digital **imaging** system)

IT Photographic emulsions

(color; color **photog.** paper contg. specified cyan coupler for showing excellent color reprodn. by digital **imaging** system)

IT 81-77-6

(Microlith Blue A 3R-K; pigment in color **photog.** paper contg. specified cyan coupler for showing excellent color reprodn. by digital **imaging** system)

IT 31037-84-0 93951-12-3 117827-06-2 **243844-33-9**

289708-41-4 405922-49-8

(cyan coupler in color **photog.** paper for showing excellent color reprodn. by digital **imaging** system)

IT 17741-63-8, Violet B-K

(pigment in color **photog.** paper contg. specified cyan coupler for showing excellent color reprodn. by digital **imaging** system)

L67 ANSWER 20 OF 152 HCA COPYRIGHT 2005 ACS on STN

136:348326 Silver halide color photographic

material and methods for treatment of the material, for image formation, and for formation of color proof.

Takahashi, Osamu; Yoneyama, Hiroyuki; Shimada, Yasuhiro (Fuji Photo Film Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 2002122969 A2 20020426, 92 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 2000-315963 20001016.

GI

Ι

AB The photog. material involves a cyan coupler-contg.

Ag halide emulsion layer, a magenta coupler-contg.

Ag halide emulsion layer, and a yellow

coupler-contg. Ag halide emulsion layer on a

support, which satisfies equations regarding wavelength corresponding to absorbance and max. absorbance in spectrophotometry curve of the material after exposure and development using aminoanilines I [R1, R2 = (substituted) alkyl; R3 = substituent] as a main developer. The material after exposure is bleach-fixed with a lig. contg. 1 .times. 10-2-2 mol bromide ion and/or 5 .times. 10-4-5 .times. 10-2 mol iodide ion. The material is scan for .ltoreq.103 s for exposure and developed. The color proof is manufd. by exposure and development of the above material according to color-sepd. yellow image information, magenta image information, cyan image information, and black **image** information. The process is suitable for manuf. of so-called direct digital color proof.

184947-09-9 188745-52-0 210965-01-8 IT

> (cyan coupler; for silver halide color photog. material for manuf. of color proof for printing plate making)

RN184947-09-9 HCA

1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, CN 6-cyano-2-[4-(1,1-dimethylethyl)phenyl]-5-[[(di-2propenylamino)carbonyl]oxy]-, 2,6-bis(1,1-dimethylethyl)-4methylcyclohexyl ester (9CI) (CA INDEX NAME)

RN 188745-52-0 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, 6-cyano-2-[4-(1,1-dimethylethyl)phenyl]-5-[(4morpholinylcarbonyl)oxy]-, 2,6-bis(1,1-dimethylethyl)-4methylcyclohexyl ester (9CI) (CA INDEX NAME)

RN 210965-01-8 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, 5-[[[bis(2-cyanoethyl)amino]carbonyl]oxy]-6-cyano-2-[4-(1,1-dimethylethyl)phenyl]-, 2,6-bis(1,1-dimethylethyl)-4-methylcyclohexyl ester (9CI) (CA INDEX NAME)

IC ICM G03C007-20

ICS G03C005-08; G03C007-00; G03C007-413; G03C007-42

CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

ST color proof manuf silver halide emulsion;

photog coupler emulsion printing plate making; developer
bleaching agent photog emulsion

IT Photographic developers

(aminoanilines; for silver halide color photog. material for manuf. of color proof for printing plate making)

Bromides, uses IT Iodides, uses (in photog. bleaching agent; for silver halide color photog. material for manuf. of color proof for printing plate making) IT Cyan couplers Magenta couplers Yellow couplers (in silver halide color photog. material for manuf. of color proof for printing plate making) IT Bleaching agents (photog., contg. bromide and/or iodide ion; for silver halide color photog. material for manuf. of color proof for printing plate making) IT Photographic emulsions Printing plates (silver halide color photog. material for manuf. of color proof for printing plate making) IT 184947-09-9 188745-52-0 210965-01-8 289708-41-4 (cyan coupler; for silver halide color photog. material for manuf. of color proof for printing plate making) IT 136647-65-9 417702-40-0 417702-41-1 417702-42-2 417702-43-3 417702-44-4 (magenta coupler; for silver halide color photog. material for manuf. of color proof for printing plate making) IT 137320-46-8 144365-76-4 417702-37-5 417702-38-6 417702-39-7 (yellow coupler; for silver halide color photog. material for manuf. of color proof for printing plate making) L67 ANSWER 30 OF 152 HCA COPYRIGHT 2005 ACS on STN 135:350620 High sensitive color photothermographic material containing ultraviolet absorber. Kato, Kazunobu; Yabuki, Yoshiharu (Fuji Photo Jpn. Kokai Tokkyo Koho JP 2001312025 A2 Film Co., Ltd., Japan). **20011109**, 76 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 2000-131445 20000428. AB The material contains an org. Ag salt, a reducing agent, a color-forming material, a photosensitive Ag halide , a hydrophobic and thermoplastic org. binder, and the UV absorber.

It showed improved image storage stability.

(coupler; photothermog. material contg. UV absorbent)

1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid,

6-cyano-2-[4-(1,1-dimethylethyl)phenyl]-5-[(4-

IT

RN CN 188745-52-0

188745-52-0 HCA

morpholinylcarbonyl)oxy]-, 2,6-bis(1,1-dimethylethyl)-4-methylcyclohexyl ester (9CI) (CA INDEX NAME)

IC ICM G03C001-498

ICS G03C001-498

CC 74-7 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

IT 7588-27-4 **188745-52-0**

(coupler; photothermog. material contg. UV absorbent)

L67 ANSWER 40 OF 152 HCA COPYRIGHT 2005 ACS on STN

134:302954 Silver halide photographic

material containing compound with novel ballast group. Mikoshiba, Takashi; Tateishi, Keiichi; Matsuda, Naoto (Fuji Photo Film Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 2001100378 A2 20010413, 40 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1999-279837 19990930.

GΙ

PUG-L1
$$\stackrel{(R^1)_n}{\longrightarrow}$$
 $\stackrel{R^2}{\longrightarrow}$ $L^2-CO-N-L^3-CO_2H$

AB The material contains I (L1 = alkylene, CO, SO2, NR3, O, or their combination; L2 = alkylene, O, S, NR4, or their combination; L3 =

Ι

arylene, alkylene, cycloalkylene, bicycloalkylene, R1 = substituent; R2-4 = H, substituent; n = 0-4; PUG = residue of **photog.** useful compd.). The above PUG may be a cyan coupler residue. The ballast group shows high reactivity and anti-diffusion property, the cyan coupler with the ballast group shows less magenta stain, and the material gives clear **images** with lightfastness.

IT 334001-31-9 334001-32-0 334001-33-1 334001-34-2

(photog. coupler having novel ballast group)

RN 334001-31-9 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, 2-[3-[[2-[[1-[[(2-carboxyethyl)amino]carbonyl]undecyl]oxy]-5-(1,1,3,3-tetramethylbutyl)phenyl]sulfonyl]amino]-4-methoxyphenyl]-6cyano-, 7-[2,6-bis(1,1-dimethylethyl)-4-methylcyclohexyl] ester (9CI) (CA INDEX NAME)

PAGE 1-A Me Me-C-CH2-CMe3 OMe NC. t-Bu 0 NH-0- C NH 0 0-CH Bu-t Me - NH-0

PAGE 1-B

—— СH₂— СH₂— СО₂Н

RN 334001-32-0 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, 2-[3-[[2-[[1-[[(3-carboxypropyl)amino]carbonyl]nonyl]oxy]-5-(1,1-dimethylethyl)phenyl]sulfonyl]amino]-4-methoxyphenyl]-5-chloro-6-cyano-, 7-[2,6-bis(1,1-dimethylethyl)-4-methylcyclohexyl] ester (9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 1-B

$$-$$
 (CH₂)₇-Me

--- (CH₂)₃ - CO₂H

RN 334001-33-1 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, 2-[3-[[2-[[1-[(2-carboxyethyl)amino]carbonyl]undecyl]oxy]-5-(1,1,3,3-tetramethylbutyl)phenyl]sulfonyl]amino]-4-(4morpholinyl)phenyl]-6-cyano-, 7-[2,6-bis(1,1-dimethylethyl)-4methylcyclohexyl] ester (9CI) (CA INDEX NAME)

RN 334001-34-2 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, 2-[5-[[2-[[1-[[(2-carboxyethyl)amino]carbonyl]undecyl]oxy]-5-(1,1,3,3-tetramethylbutyl)phenyl]sulfonyl]amino]-2-methoxyphenyl]-6cyano-, 7-[2,6-bis(1,1-dimethylethyl)-4-methylcyclohexyl] ester (9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 1-B

```
- (CH<sub>2</sub>)<sub>9</sub>-Me
```

--- CH₂- CH₂- CO₂H

IT 334001-30-8P

(photog. coupler having novel ballast group)

RN 334001-30-8 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, 2-[3-[[2-[[1-[[(2-carboxyethyl)amino]carbonyl]undecyl]oxy]-5-(1,1,3,3-tetramethylbutyl)phenyl]sulfonyl]amino]-4-methylphenyl]-6cyano-, 7-[2,6-bis(1,1-dimethylethyl)-4-methylcyclohexyl] ester (9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 1-B

```
(CH<sub>2</sub>)<sub>9</sub>-Me
     CH_2 - CH_2 - CO_2H
IC
     ICM
          G03C007-305
     ICS
          G03C001-43; G03C007-38; C07C235-20; C07C309-75; C07C311-08;
          C07C311-29; C07D231-52; C07D233-66; C07D295-20; C07D413-06;
          C07D487-04
     74-2 (Radiation Chemistry, Photochemistry, and
CC
     Photographic and Other Reprographic Processes)
ST
     photog coupler ballast group
IT
     Photographic couplers
         (photog. coupler having novel ballast group)
IT
     334001-31-9 334001-32-0 334001-33-1
     334001-34-2
                                   334001-36-4
                    334001-35-3
                                                   334001-37-5
     334001-38-6
                    334001-39-7
                                   334001-40-0
                                                   334001-41-1
                                                                  334001-42-2
```

334001-47-7 334001-43-3 334001-44-4 334001-45-5 334001-46-6 (photog. coupler having novel ballast group)

IT 334001-30-8P

(photog. coupler having novel ballast group)

924-73-2P, .beta.-Alanine ethyl ester IT

(prepn. of photog. coupler with novel ballast group)

7790-94-5, Chlorosulfonic acid IT

(prepn. of photog. coupler with novel ballast group)

L67 ANSWER 50 OF 152 HCA COPYRIGHT 2005 ACS on STN

133:342412 Silver halide photographic

material using reflective support coated with polymer layer. Yamazaki, Isatada; Nakamura, Takeshi (Konica Co., Japan). Jpn. Kokai Tokkyo Koho JP 2000305218 A2 20001102, 57 pp.

(Japanese). CODEN: JKXXAF. APPLICATION: JP 1999-116541 19990423.

GI

In the material comprising a reflective support composed of a base ABpaper coated with resin layers on both sides and .gtoreq.1 Ag halide emulsion layer and .gtoreq.1

non-photosensitive hydrophilic colloidal layer, the resin layer on the emulsion layer side contains a biaxially drawn polymer layer (thickness 10-30 .mu.m) contg. .gtoreq.10 wt.% white pigments. the material, (1) the total gelatin in the emulsion layer and the colloidal layer may be .ltoreq.6.5 g/m2, (2) .gtoreq.1 of the emulsion layer may contain .gtoreq.1 yellow coupler selected from I, II, and R21R22NCOCX3HCONHR23 (R1-2 = alkyl, cycloalkyl, aryl; R3 = H, halo, acylamino; X1-3 = releasing group by the reaction with developer oxide; R11 = monovalent substituent other than H; Q = nonmetal atoms to form 3-5-membered hydrocarbon ring or a heterocycle contg. N, S, O, or P; R12 = H, halo, alkyl, alkoxy, aryloxy, amino; R13 = substituent; R21-22 = alkyl, aryl, heterocycle; R23 = aryl, heterocycle; R21 and R22 may form a N-contg. heterocycle), or (3) .gtoreq.1 of the emulsion layer may contain .gtoreq.1 cyan coupler selected from III, IV, V, and VI (R41, R43, R46-47 = H, substituent; R42 = substituent; when m = 0,R41 = substituent with Hammett's .sigma.p .gtoreq.0.20; when m = .gtoreq.1, .gtoreq.1 of R41 and R42 is substituent with Hammett's .sigma.p .gtoreq.0.20; Z1, Z3 = nonmetal atoms to form 5-membered N-contg. heterocycle; Z2 = nonmetal atoms to form 6-membered heterocycle which may be substituted or condensed with benzene ring; Z4 = nonmetal atoms to form 6-membered heterocycle; R44-45 = substituent with .sigma.p .gtoreq.0.20; X31-34 = releasing group by coupling reaction with developer oxide). The material shows good color reproducibility, pressure resistance, cutting property, and suited for rapid processing.

IT 154021-59-7 200137-20-8 303189-37-9 303189-38-0

(photog paper contg. amide compd. yellow coupler and azole compd. cyan coupler)

RN 154021-59-7 HCA

CN 1H-Pyrrolo[2,1-c]-1,2,4-triazole-6-carboxylic acid,
3-[4-[[2-[2,4-bis(1,1-dimethylpropyl)phenoxy]-1oxobutyl]amino]phenyl]-5-chloro-7-cyano-, ethyl ester (9CI) (CFINDEX NAME)

RN 200137-20-8 HCA
CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid,
2-[3-[[2-[2,4-bis(1,1-dimethylpropyl)phenoxy]-1oxobutyl]amino]phenyl]-6-cyano-5-[[(diethylamino)carbonyl]oxy]-,
2.6-bis(1,1-dimethylethyl)cyclohexyl ester (9CI) (CA INDEX NAME)

RN 303189-37-9 HCA
CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid,
2-(4-butylphenyl)-6-cyano-5-[(4-morpholinylcarbonyl)oxy]-,
2,6-bis(1,1-dimethylethyl)-4-methylcyclohexyl ester (9CI) (CA INDEX NAME)

RN 303189-38-0 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, 5-(benzoyloxy)-2-butyl-6-cyano-, 2,6-bis(1,1-dimethylethyl)-4methylcyclohexyl ester (9CI) (CA INDEX NAME)

IC ICM G03C001-79

ICS G03C001-74; G03C007-36; G03C007-38

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

ST photog paper polymer layer white pigment; coupler photog paper cyan yellow

IT Photographic couplers

(photog paper contg. amide compd. yellow coupler and azole compd cyan coupler)

IT Photographic paper

(photog. paper coated with biaxially drawn polymer contg. white pigment)

IT 127983-19-1 144916-81-4 150919-56-5 151645-05-5 154021-59-7 155218-20-5 170446-98-7 172650-64-5 200137-20-8 208345-82-8 256367-16-5 267890-39-1 303189-34-6 303189-36-8 303189-37-9 303189-38-0 (photog paper contg. amide compd. yellow coupler and

azole compd. cyan coupler)
9003-07-0, Polypropylene 9003-53-6, Polystyrene
(photog. paper coated with biaxially drawn polymer

contg. white pigment)

IT

IT

13463-67-7, Titania, uses (photog. paper coated with biaxially drawn polymer contq. white pigment)

L67 ANSWER 60 OF 152 HCA COPYRIGHT 2005 ACS on STN
131:315796 Image information recording using silver
halide color photographic material. Iwai,
Yoshiko; Hirabayashi, Shigehito (Konica Co., Japan). Jpn. Kokai
Tokkyo Koho JP 11295863 A2 19991029 Heisei, 88 pp.
(Japanese). CODEN: JKXXAF. APPLICATION: JP 1998-116002 19980410.

AB A photosensitive material, contg. a photosensitive Ag halide, a color developing agent, a dye-donating coupler, and a binder on a support, is developed following imagewise exposure and the image information formed in the material is converted to elec. information in a wet state without drying and recorded on other recording material on the basis of the information. High quality image information is obtained simply and rapidly without drying process by using a Ag halide color photog. material contg. a color developing agent therein.

IT 175709-28-1 247248-79-9

(photog. film contg. coupler and developer giving images readable by optical character reader)

RN 175709-28-1 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, 2-(4-chlorophenyl)-6-cyano-, 2,6-bis(1,1-dimethylethyl)-4methylcyclohexyl ester (9CI) (CA INDEX NAME)

CN Benzoic acid, 4-[[6-(2-methoxyphenoxy)-2-[3-[[[2-(octyloxy)-5-(1,1,3,3-tetramethylbutyl)phenyl]sulfonyl]amino]phenyl]-1H-pyrrolo[1,2-b][1,2,4]triazol-7-yl]oxy]-, methyl ester (9CI) (CA INDEX NAME)

IC ICM G03C007-392

ICS G03C001-42

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

ST photog film coupler developer; optical character reader photog image

IT Photographic films

(photog. film contg. coupler and developer giving images readable by optical character reader)

IT 111130-66-6 160028-18-2 175539-10-3 **175709-28-1**

182297-11-6 187977-00-0 188894-83-9 188894-91-9 247248-76-6

247248-77-7 247248-78-8 **247248-79-9** 247248-80-2

247248-81-3

(photog. film contg. coupler and developer giving images readable by optical character reader)

L67 ANSWER 70 OF 152 HCA COPYRIGHT 2005 ACS on STN 131:122880 Developer composition for silver halide

color photographic material and development. Noguchi,

Atsushi (Fuji Photo Film Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 11194462 A2 19990721 Heisei, 56 pp. (Japanese).

CODEN: JKXXAF. APPLICATION: JP 1997-361249 19971226.

AB The developer compn. consists of 1 part of a concd. soln. in which the concn. of carbonates is in the range of 0.5-2 M, the K+ to Na+ ratio is in the range of 1-4, and the pH value is .gtoreq.12.5. A Ag halide color photog. material contq.

a pyrrolotriazole deriv. as a cyan coupler is developed with the compn. The compn. contg. developing agents in a high concn. shows excellent storage stability and the deposition of insol. matters upon storage and coloration of the processing soln. and container due to air oxidn. are prevented.

IT 188745-52-0

(development of **photog.** film contg. pyrrolotriazole deriv. as a cyan coupler)

RN 188745-52-0 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, 6-cyano-2-[4-(1,1-dimethylethyl)phenyl]-5-[(4-morpholinylcarbonyl)oxy]-, 2,6-bis(1,1-dimethylethyl)-4-methylcyclohexyl ester (9CI) (CA INDEX NAME)

IC ICM G03C007-413

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

ST photog developer carbonate; potassium sodium content photog developer; pyrrolotriazole coupler photog film development

IT Surfactants

(anionic; carbonate, potassium, and sodium ion content-controlled **photog.** developer)

IT Photographic developers

(carbonate, potassium, and sodium ion content-controlled photog. developer)

IT Cyan couplers

(development of **photog**. film contg. pyrrolotriazole deriv. as a cyan coupler)

IT 102-71-6, uses 122-20-3, Triisopropanolamine 584-08-7, Potassium

carbonate 657-84-1, Sodium p-toluenesulfonate 5080-22-8, Isopropylhydroxylamine

(carbonate, potassium, and sodium ion content-controlled photog. developer)

IT 188745-52-0

(development of **photog.** film contg. pyrrolotriazole deriv. as a cyan coupler)

IT 118181-83-2

(surfactant; carbonate, potassium, and sodium ion content-controlled **photog**. developer)

L67 ANSWER 80 OF 152 HCA COPYRIGHT 2005 ACS on STN

130:344973 Silver halide photographic

material for color filter formation. Mizukawa, Hiroki (Fuji Photo Film Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 11109123 A2 19990423 Heisei, 48 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1997-267112 19970930.

GI

ABThe material contains a red dye- or a magenta dye-releasing coupler having a formula Q1(TIME) nLmDY or a red or magenta colored coupler having a formula Q2N:NR1 [Q1, 2 = coupler residue I, II, or III; TIME = timing group that releases (TIME) n-1LmDY after eliminating Q1 or timing group that releases (TIME) n-2LmDY after being eliminated from TIME; R1 = aryl, heterocyclic; n, m = 0, 1, 2, 3; L = divalent group; DY = red or magenta dye residue; R2 = alkyl, cycloalkyl, alkenyl, aryl, heterocyclic, alkoxy, cycloalkyloxy, alkenyloxy, aryloxy, alkylamino, cycloalkylamino, alkenylamino, arylamino, heterocyclic amino; R3, 4 = substituent; p = 0-3 integer; R5, 7, 8 = H, substituent; q = 0-4 integer; M = CO, SO2; R6 = alkyl, cycloalkyl, aryl, heterocyclic, alkoxy, cycloalkyloxy, aryloxy, heterocyclicoxy, alkylamino, cycloalkylamino, arylamino, heterocyclic amino; Z1, 2 = N, CR9; R9 = H, alkyl, cycloalkyl, alkenyl, aryl, heterocyclic]. The method involves exposing the material, color-developing, and desilverizing to obtain the filter having a blue, green, and red pixel pattern. The filter contains

the coupler. The filter with light transmittance, excellent heat and light fastness, and thin film thickness is manufd. using the material.

IT 223734-74-5P

CN

(Ag halide photog. material for

color filter contq. red or magenta coupler)

RN 223734-74-5 HCA

1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid,
5-[[3-[[3-[[4-[[2-[4-(acetylamino)phenyl]-6-(1,1-dimethylethyl)-7H-pyrazolo[1,5-b][1,2,4]triazol-7-ylidene]amino]-3methylphenyl]ethylamino]-1-oxopropyl]amino]-2-methylbenzoyl]oxy]-6cyano-2-[4-(1,1-dimethylethyl)phenyl]-, 2,6-bis(1,1-dimethylethyl)-4methylcyclohexyl ester (9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 1-B

PAGE 2-A

IT 223734-69-8P 223734-70-1P

(Ag halide photog. material for

color filter contg. red or magenta coupler)

RN 223734-69-8 HCA

CN 1H-Pyrrolo[1,2-b] [1,2,4]triazole-5,7-dicarboxylic acid, 6-cyano-2-[4-(1,1-dimethylethyl)phenyl]-, 7-[2,6-bis(1,1-dimethylethyl)-4-methylcyclohexyl] 5-(2-methyl-3-nitrophenyl) ester (9CI) (CA INDEX NAME)

RN 223734-70-1 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-5,7-dicarboxylic acid, 6-cyano-2-[4-(1,1-dimethylethyl)phenyl]-, 5-(3-amino-2-methylphenyl) 7-[2,6-bis(1,1-dimethylethyl)-4-methylcyclohexyl] ester (9CI) (CA INDEX NAME)

$$t-Bu$$
 $t-Bu$
 $t-Bu$
 $t-Bu$
 $t-Bu$
 $t-Bu$
 $t-Bu$

IT 223734-75-6 223734-76-7 223734-77-8
223734-78-9 223734-79-0 223734-80-3
223734-81-4 224045-18-5 224045-35-6
(Ag halide photog. material for color filter contg. red or magenta coupler)
RN 223734-75-6 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid,

6-cyano-5-[[3-[[4-[[6-(1,1-dimethylethyl)-2-[4-[(methylsulfonyl)amino]phenyl]-7H-pyrazolo[1,5-b][1,2,4]triazol-7-ylidene]amino]-3-methylphenyl]ethylamino]-1-oxopropyl]amino]-2-methylbenzoyl]oxy]-2-[4-(1,1-dimethylethyl)phenyl]-, 2,6-bis(1,1-dimethylethyl)-4-methylcyclohexyl ester (9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 1-B

RN 223734-76-7 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, 6-cyano-5-[[3-[[4-[[6-(1,1-dimethylethyl)-2-(1-methylethyl)-7H-pyrazolo[1,5-b][1,2,4]triazol-7-ylidene]amino]-3-methylphenyl]ethylamino]-1-oxopropyl]amino]-2-methylbenzoyl]oxy]-2-[4-(1,1-dimethylethyl)phenyl]-, 2,6-bis(1,1-dimethylethyl)-4-methylcyclohexyl ester (9CI) (CA INDEX NAME)

PAGE 1-A

t-Bu

NC_

PAGE 1-B

RN 223734-77-8 HCA CN 1H-Pvrrolo[1,2-b]

1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid,
5-[[3-chloro-5-[[3-[[4-[[6-(1,1-dimethylethyl)-2-[1-methyl-2[(methylsulfonyl)amino]ethyl]-7H-pyrazolo[1,5-b][1,2,4]triazol-7ylidene]amino]-3-methylphenyl]ethylamino]-1oxopropyl]amino]benzoyl]oxy]-6-cyano-2-[4-(1,1-dimethylethyl)phenyl], 2,6-bis(1,1-dimethylethyl)-4-methylcyclohexyl ester (9CI) (CA
INDEX NAME)

PAGE 1-A

PAGE 1-B

RN 223734-78-9 HCA
CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid,
5-[[[4-[3-[[4-[2-[2-[(3-carboxy-1-oxopropyl)amino]-1-methylethyl]-6(2-chlorophenyl)-7H-pyrazolo[1,5-b][1,2,4]triazol-7-ylidene]amino]-3(trifluoromethyl)phenyl]ethylamino]-1-oxopropyl]-1piperazinyl]carbonyl]oxy]-6-cyano-2-[4-(1,1-dimethylethyl)phenyl]-,
7-[2,6-bis(1,1-dimethylethyl)-4-methylcyclohexyl] ester (9CI) (CA

INDEX NAME)

PAGE 1-A

PAGE 1-B

PAGE 2-A

RN 223734-79-0 HCA
CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid,
5-[[2-[6-[2-[(3-carboxy-1-oxopropyl)amino]phenyl]-7-[[4(diethylamino)-2-(trifluoromethyl)phenyl]imino]-7H-pyrazolo[1,5b][1,2,4]triazol-2-yl]propyl]ethylamino]-6-cyano-2-[4-(1,1dimethylethyl)phenyl]-, 7-[2,6-bis(1,1-dimethylethyl)-4methylcyclohexyl] ester (9CI) (CA INDEX NAME)

$$t-Bu$$
 $t-Bu$
 $t-Bu$

RN 223734-80-3 HCA
CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid,
5-[[5-[[[3-(aminocarbonyl)-4-[(2,3,6,7-tetrahydro-1H,5H-benzo[ij]quinolizin-9-yl)azo]phenyl]sulfonyl]amino]-2chlorobenzoyl]oxy]-6-cyano-2-[4-methyl-3-[[[2-(octyloxy)-5-(1,1,3,3-tetramethylbutyl)phenyl]sulfonyl]amino]phenyl]-,
2,6-bis(1,1-dimethylethyl)-4-methylcyclohexyl ester (9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 2-A

$$\begin{array}{c|c} & \text{Me- (CH_2)}_{\,7-\,0} \\ & \text{NH} \\ & \text{O-S-0} \\ & \text{Me} \\ & \text{H}_2\text{N-C} \\ & \text{O} \\ & \text{N} \\ & \text{N} \\ \end{array}$$

RN 223734-81-4 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid,
5-(2-benzothiazolylazo)-2-[3-[[[[7-[[[2,6-bis(1,1-dimethylethyl)-4-methylcyclohexyl]oxy]carbonyl]-6-cyano-2-[4-methyl-3-[[[2-(octyloxy)-5-(1,1,3,3-tetramethylbutyl)phenyl]sulfonyl]amino]phenyl]-1H-pyrrolo[1,2-b][1,2,4]triazol-5-yl]oxy]carbonyl]methylamino]phenyl]-6-cyano-, 2-carboxyethyl ester (9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 1-B

RN 224045-18-5 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, 5-[[[1,4-bis(acetylamino)-3-oxo-3H-phenothiazin-7-

yl]ethylamino]carbonyl]oxy]-6-cyano-2-[4-methyl-3-[(1-oxoisooctadecyl)amino]phenyl]-, 2,6-bis(1,1-dimethylethyl)-4-methylcyclohexyl ester (9CI) (CA INDEX NAME)

RN 224045-35-6 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, 5-[[[1,4-bis(acetylamino)-2-chloro-3-oxo-3H-phenoxazin-7-yl]ethylamino]carbonyl]oxy]-6-cyano-2-[4-methyl-3-[(1-oxoisooctadecyl)amino]phenyl]-, 2,6-bis(1,1-dimethylethyl)-4-methylcyclohexyl ester (9CI) (CA INDEX NAME)

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G02B005-20
IC
     ICM
     ICS
          G02B005-22; G03C007-20; G03C007-333; G03C007-34; G03C007-38;
          G03C007-407
CC
     74-2 (Radiation Chemistry, Photochemistry, and
     Photographic and Other Reprographic Processes)
ST
    photog material color filter magenta coupler; red coupler
     color filter photo material
ΙT
     Optical filters
       Photographic films
        (Ag halide photog. material for
        color filter contg. red or magenta coupler)
IT
     223734-74-5P
        (Ag halide photog. material for
        color filter contq. red or magenta coupler)
IT
     35675-46-8
                  73164-51-9
                               194419-31-3
                                              223734-71-2
        (Ag halide photog. material for
        color filter contg. red or magenta coupler)
IT
     223734-69-8P 223734-70-1P
                                 223734-72-3P
        (Ag halide photog. material for
        color filter contg. red or magenta coupler)
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223734-73-4 **223734-75-6 223734-76-7 223734-77-8 223734-78-9 223734-79-0 223734-80-3 223734-81-4 224045-18-5**

IT

224045-35-6

(Ag halide photog. material for color filter contq. red or magenta coupler)

ANSWER 90 OF 152 HCA COPYRIGHT 2005 ACS on STN

130:73788 Heat-developable photographic image

formation. Nakamura, Takashi; Ishikawa, Shunichi (Fuji Photo Film Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 10319553 A2 19981204 Heisei, 40 pp. (Japanese). CODEN: JKXXAF.

APPLICATION: JP 1997-147110 19970521.

AB A photosensitive material, possessing .gtoreq.1 photosensitive layer contq. tabular Ag halide grains, color developing agents, couplers, and binders on a transparent support, is imagewise exposed and 5-30 cc/m2 of water which may contain a base and/or its precursor is applied to the material which has been heated previously to 60-100.degree., followed by heat-treating the material at 60-100.degree. for 5-60 s in such a state that .qtoreq.90% of the applied water is maintained to form an image based on non-diffusive dyes formed by coupling reaction of the oxidized color developing agents and the couplers on the material. High quality color images with good graininess and sharpness are obtained quickly by a simple heat development process and the material shows good storage stability. IT 180200-98-0

(cyan coupler; heat-developable photog. film contq. silver halide, developer, and coupler)

RN 180200-98-0 HCA

1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, CN 6-cyano-2-[4-methyl-3-[[[2-(octyloxy)-5-(1,1,3,3tetramethylbutyl) phenyl] sulfonyl] amino] phenyl] -, 2,6-bis(1,1-dimethylethyl)-4-methylcyclohexyl ester (9CI) NAME)

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ICS G03C001-42; G03C007-392; G03C007-42; G03C011-00
     74-2 (Radiation Chemistry, Photochemistry, and
CC
     Photographic and Other Reprographic Processes)
     heat developable photog film developer coupler; base water
ST
     heat developable photog film
IT
     Photographic films
        (heat-developable; heat-developable photog. film contg.
        silver halide, developer, and coupler)
IT
     180200-98-0
        (cyan coupler; heat-developable photog. film contg.
        silver halide, developer, and coupler)
IT
     196105-81-4
                   197859-22-6
        (developer; heat-developable photog. film contg.
        silver halide, developer, and coupler)
     75-59-2, Tetramethylammonium hydroxide
IT
                                             6145-42-2,
     N, N, -Dimethylquanidine
        (heat-developable photog. film treated with base-contg.
        water)
     217961-21-2
IT
        (magenta coupler; heat-developable photog. film contg.
        silver halide, developer, and coupler)
     211624-18-9
IT
        (yellow coupler; heat-developable photog. film contq.
        silver halide, developer, and coupler)
    ANSWER 100 OF 152 HCA COPYRIGHT 2005 ACS on STN.
129:10562 Image formation method for silver
     halide photography using heat development.
     Taguchi, Toshiki; Takeuchi, Kiyoshi (Fuji Photo Film Co., Ltd.,
     Japan). Jpn. Kokai Tokkyo Koho JP 10097043 A2 19980414
     Heisei, 87 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP
     1996-269344 19960919.
     In the process comprising the steps of developing a photosensitive
AB
     material contg. a photosensitive emulsion layer by heat at the
    presence of a base or a base precursor upon putting together with a
     processing sheet coated with a binder and then peeling off the
    processing sheet to form an image on the heat-sensitive
     material and/or the processing sheet, the photo-sensitive material
     comprises a coupler, which reacts with an acidic material from the
     light-sensitive emulsion layer to contribute to an image
     formation, or a coupler, which reacts with an acid material in the
     developer not contributing to an image formation, in the
     light-sensitive emulsion layer. The method provides good
     image discrimination and reprodn. of the gradation.
IT
     180200-98-0
        (coupler for heat-developable silver halide
       photog.)
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RN

180200-98-0 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, 6-cyano-2-[4-methyl-3-[[[2-(octyloxy)-5-(1,1,3,3tetramethylbutyl)phenyl]sulfonyl]amino]phenyl]-, 2,6-bis(1,1-dimethylethyl)-4-methylcyclohexyl ester (9CI) (CA INDEX NAME)

IC ICM G03C008-40

ICS G03C008-40; G03C008-50

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

ST image formation method heat development; silver halide photosensitive photog; coupler development silver halide photog

IT Photographic couplers

Photography

(Image formation method for silver halide photog. using heat development)

IT Photographic films

photoq.)

(heat-developable; Image formation method for silver halide photog. using heat

development)

IT 152828-26-7 **180200-98-0** 207352-63-4 207352-65-6 207352-67-8 207352-68-9 (coupler for heat-developable **silver halide**

L67 ANSWER 110 OF 152 HCA COPYRIGHT 2005 ACS on STN

128:68434 Silver halide color photographic

material with improved color reproduction quality and storage stability. Takada, Kiyoto (Fuji Photo Film Co., Ltd., Japan). Jpn Kokai Tokkyo Koho JP 09288336 A2 19971104 Heisei, 41 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1996-101555 19960423.

GI

NC
$$CO_2$$
 Z R^5 Z R^5 Z R^6

The material has .gtoreq.1 photosensitive Ag AB halide emulsion layer contg. .gtoreq.1 coupler I [R1-5 = H, substituent; Z = (substituted) nonmetal at. group required to form ring; X = heterocycle; (substituted) amino, aryl; Y = H, substituent; R6 = substituent] and AgI-free Ag(Br,Cl) or AgCl particles (AgCl content .gtoreq.98 mol%) sensitized with a Au compd. The material shows improved color reprodn. quality and storage stability.

IT7783-90-6, Silver chloride, uses

> (content-controlled; silver halide color photog. material contg. cyan coupler for improved color reprodn. quality)

RN 7783-90-6 HCA

CN Silver chloride (AgCl) (9CI) (CA INDEX NAME)

Ι

Ag—Cl

IT 178743-91-4 184947-09-9 200049-62-3 200049-63-4 200049-64-5 200049-65-6 (silver halide color photog.

material contg. cyan coupler for improved color reprodn. quality)

RN178743-91-4 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, 6-cyano-2-(1,1-dimethylethyl)-5-[(4-morpholinylcarbonyl)oxy]-, 2,6-bis(1,1-dimethylethyl)-4-methylcyclohexyl ester (9CI) (CA INDEX NAME)

RN 184947-09-9 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, 6-cyano-2-[4-(1,1-dimethylethyl)phenyl]-5-[[(di-2propenylamino)carbonyl]oxy]-, 2,6-bis(1,1-dimethylethyl)-4methylcyclohexyl ester (9CI) (CA INDEX NAME)

RN 200049-62-3 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, 5-(benzoyloxy)-6-cyano-2-(1,1-dimethylethyl)-, 2,6-bis(1,1-dimethylpropyl)-4-methylcyclohexyl ester (9CI) (CA INDEX NAME)

RN 200049-63-4 HCA
CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid,
6-cyano-5-[[(di-2-propenylamino)carbonyl]oxy]-2-(1-ethylpentyl)-,
1,2,2,6,6-pentamethylcyclohexyl ester (9CI) (CA INDEX NAME)

RN 200049-64-5 HCA
CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid,
6-cyano-2-[4-methyl-3-[[[2-(octyloxy)-5-(1,1,3,3tetramethylbutyl)phenyl]sulfonyl]amino]phenyl]-5-[(4morpholinylcarbonyl)oxy]-, 2,6-bis(1,1-dimethylethyl)-4[(dodecyloxy)methyl]cyclohexyl ester (9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 1-B

Me
$$Me^{-C-CH_2-CMe_3}$$
 $O^{-(CH_2)}7^{-Me}$

RN 200049-65-6 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, 6-cyano-2-[3-[(2-hexyl-1-oxodecyl)amino]-4-methylphenyl]-5-[(4-morpholinylcarbonyl)oxy]-, 2,6-bis(1,1-dimethylethyl)-4-methylcyclohexyl ester (9CI) (CA INDEX NAME)

IT 188745-52-0P

(silver halide color photog.

material contg. cyan coupler for improved color reprodn. quality)

RN 188745-52-0 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, 6-cyano-2-[4-(1,1-dimethylethyl)phenyl]-5-[(4-morpholinylcarbonyl)oxy]-, 2,6-bis(1,1-dimethylethyl)-4-methylcyclohexyl ester (9CI) (CA INDEX NAME)

IC ICM G03C007-38

ICS G03C001-035; G03C001-09; G03C007-00

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

```
ST
     photog material cyan coupler; gold sensitizer
     photog material silver halide
     Photographic sensitizers
IT
        (gold compd.; silver halide color
        photog. material contg. cyan coupler for improved color
        reprodn. quality)
     Cyan couplers
IT
       Photographic films
        (silver halide color photog.
        material contq. cyan coupler for improved color reprodn. quality)
     7783-90-6, Silver chloride, uses
IT
        (content-controlled; silver halide color
        photog. material contg. cyan coupler for improved color
        reprodn. quality)
     16903-35-8, Chloroauric acid
IT
        (sensitizer; silver halide color
        photog. material contg. cyan coupler for improved color
        reprodn. quality)
IT
     178743-91-4 184947-09-9 200049-62-3
     200049-63-4 200049-64-5 200049-65-6
        (silver halide color photog.
        material contg. cyan coupler for improved color reprodn. quality)
     188745-52-0P
IT
        (silver halide color photog.
        material contg. cyan coupler for improved color reprodn. quality)
                    194419-30-2P
IT
     190436-30-7P
                                   194419-31-3P
                                                  200049-66-7P
        (silver halide color photog.
        material contg. cyan coupler for improved color reprodn. quality)
IT
     105-34-0, Methyl cyanoacetate 15159-40-7, 4-Morpholinecarbonyl
               163119-16-2, 2,6-Di-tert-butyl-4-methylcyclohexanol
     chloride
     194419-32-4
        (silver halide color photog.
        material contq. cyan coupler for improved color reprodn. quality)
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ANSWER 120 OF 152 HCA COPYRIGHT 2005 ACS on STN

127:72946 Silver halide color photographic material with improved fog resistance. Makuta, Toshiyuki (Fuji Photo Film Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 09127660 A2

19970516 Heisei, 85 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1995-309749 19951106.

ΙI

ACOCHCONH

$$X1$$
 $R^{20}COCHCONH$
 X^{2}
 X^{2}

$$X^{-1}$$
 X^{-1}
 X

AB The title material contains a yellow coupler(s) I (A = tert-alkyl, tert-cycloalkyl, aliph. heterocyclyl; aryl, indolyl; W = halo, alkoxy, aryloxy, alkyl, acyloxy, dialkylamino; X1 = H, substituent; Y1 = acylamino, alkoxy, sulfoneamido, carbamoyl, sulfamoyl, alkoxycarbonyl, sulfonyl; R11 = H, alkyl, cycloalkyl, acyl, sulfonyl; R12, R13 = H, alkyl, alkoxy, sulfonyl) and/or II (R20 = tert-alkyl, tert-cycloalkyl, aliph. heterocyclyl, aryl, indolyl; X2 = group capable of leaving upon reaction with color developer; Y2 = halo, alkoxy, aryloxy, acyloxy, dialkylamino, alkyl; Z = NHCOR21, NHCOOR22, NHCOL1OCOR23, NHPOR24R25, NHCOL2SR26, NHCOL3COOR27, NHCOL4NR28COR29, NHCOL5CONR30R31; R21 = alkenyl, haloalkyl, haloalkenyl; R22 = alkyl, cycloalkyl, alkenyl, aryl; L1 = alkylene; R23 = alkyl, cycloalkyl, alkenyl, aryl; R24, R25 = alkyl, cycloalkyl, aryl, alkoxy, aryloxy, alkylamino, dialkylamino, anilino; L2 = alkylene; R26 = alkyl, aryl; R27 = alkyl, aryl; L4 = alkylene; R28 = H, alkyl, aryl; R29 = alkyl, aryl; L5 = alkylene; R30, R31 = H, alkyl, aryl) and a cyan coupler(s) III (Zm, Zn = CR43, N; R41, R42 = electron with drawing group; R43 = substituent; X = H, group capable of leaving upon coupling reaction with oxidized color developer).

IT 165178-13-2 184773-62-4 188745-52-0 191274-16-5

(photog. cyan coupler for improving fog resistance)

RN 165178-13-2 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, 5-chloro-6-cyano-2-[2-methoxy-5-[[[2-(octyloxy)-5-(1,1,3,3tetramethylbutyl)phenyl]sulfonyl]amino]phenyl]-,
2,6-bis(1,1-dimethylethyl)-4-methylcyclohexyl ester (9CI) (CA INDEX NAME)

RN 184773-62-4 HCA CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, 6-cyano-5-[(4-morpholinylcarbonyl)oxy]-2-[4-[[[2-(octyloxy)-5-(1,1,3,3-tetramethylbutyl)phenyl]sulfonyl]amino]phenyl]-,

2,6-bis(1,1-dimethylethyl)-4-methylcyclohexyl ester (9CI) (CA INDEX NAME)

Me Bu-t NC NH S O O (CH2)
$$7$$
 Me t-Bu

RN 188745-52-0 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, 6-cyano-2-[4-(1,1-dimethylethyl)phenyl]-5-[(4-morpholinylcarbonyl)oxy]-, 2,6-bis(1,1-dimethylethyl)-4-methylcyclohexyl ester (9CI) (CA INDEX NAME)

RN 191274-16-5 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, 6-cyano-2-(1,1-dimethylethyl)-5-[(4-morpholinylcarbonyl)oxy]-, 2,6-bis(1,1-dimethylethyl)-4-methylphenyl ester (9CI) (CA INDEX NAME)

IC ICM G03C007-36

ICS G03C007-00; G03C007-38

- CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
- ST silver halide color photog material; cyan coupler yellow acetanilide pyrroloazole

IT Photographic paper

Yellow couplers

(silver halide color photog.

material with improved fog resistance)

IT 165178-13-2 184773-62-4 188745-52-0 191274-16-5

(photog. cyan coupler for improving fog resistance)

IT 176218-64-7 176218-72-7 176533-54-3 178873-41-1 181213-60-5 184483-61-2 187102-27-8 187102-28-9 191274-09-6

(photog. yellow coupler for improving fog resistance)

L67 ANSWER 130 OF 152 HCA COPYRIGHT 2005 ACS on STN

125:181143 Silver halide color photographic

material containing pyrrolotriazole cyan coupler. Matsuoka, Mitsuyuki; Shimada, Yasuhiro; Ito, Takayuki; Ozawa, Takashi (Fuji Photo Film Co Ltd, Japan). Jpn. Kokai Tokkyo Koho JP 08146576 A2 19960607 Heisei, 62 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1994-309417 19941121.

GI

$$\begin{array}{c|cccc}
R^1 & R^2 \\
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 &$$

- The photog. material contains a coupler I [Za = CR3, N; Zb = N, CR3; R1, R2 = electron-attractive group having Hammett's .sigma.p const. 0.2-1.0; R3 = H, substituent; X = H, halo, alkoxy, heterocycloxy, acyloxy, alkoxycarbonyloxy, aryloxycarbonyloxy, carbamoyloxy; .gtoreq.1 of R and X = LC(:0) (NR4) mOH or LC(:0) (NR5) nNHR6; R5 = hydrocarbyl; R4, R6 = H, R5; n, m = 0, 1]. The photog. material may be a reversal photosensitive material. The photog. material shows good color coupling property and color developability and gives a color image with lightfastness.
- IT 180639-09-2 180639-10-5 180639-11-6 180639-12-7 180803-49-0

(Ag halide color photog. material contg. pyrrolotriazole cyan coupler)

RN 180639-09-2 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, 6-cyano-2-[1-methyl-2-[(1-oxononadecyl)amino]ethyl]-5-[[(2-methylpropoxy)carbonyl]oxy]-, 4-[(carboxymethoxy)methyl]-2,6-bis(1,1dimethylethyl)cyclohexyl ester (9CI) (CA INDEX NAME)

PAGE 1-A

Me-
$$(CH_2)_{17}$$
- C - NH - CH_2 - CH
 N
 N
 CH_2 - O
 CH_2 - O

PAGE 1-B

— сн₂— со₂н

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid,
5-[[(4-carboxyphenyl)methylamino]carbonyl]oxy]-6-cyano-2-(1methylethyl)-, 7-[2,6-bis(1,1-dimethylethyl)-4-methylcyclohexyl]
ester (9CI) (CA INDEX NAME)

RN 180639-11-6 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, 5-chloro-6-cyano-2-(1,1-dimethylethyl)-, 2-[[[(methylsulfonyl)amino]carbonyl]oxy]decyl ester (9CI) (CA INDEX NAME)

RN 180639-12-7 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, 5-[[bis(2-cyanoethyl)amino]carbonyl]oxy]-2-[2-[(3-carboxy-1-oxoheneicosyl)amino]-1-methylethyl]-6-cyano-, 1,1'',5'-trimethyl[1,1':3',1''-tercyclohexan]-2'-yl ester (9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 1-B

__ Me

RN 180803-49-0 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, 6-cyano-2-[2-[[(isohexadecyloxy)carbonyl]amino]-2-oxoethyl]-, 2,6-bis(1,1-dimethylethyl)-4-methylcyclohexyl ester (9CI) (CA INDEX NAME)

$$(iso-C_{16}H_{33})-O-C-NH-C-CH_{2} \qquad N \qquad CN \qquad 0 \qquad t-Bu \qquad Me$$

IT 180639-07-0P 180639-08-1P

(Ag halide color photog. material contg. pyrrolotriazole cyan coupler)

RN 180639-07-0 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, 2-[5-[[3-carboxy-4-(octyloxy)phenyl]sulfonyl]amino]-2methoxyphenyl]-5-chloro-6-cyano-, 7-[2,6-bis(1,1-dimethylethyl)-4methylcyclohexyl] ester (9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 1-B

- (CH₂)₇-Me

RN 180639-08-1 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, 2-[4-[2-(carboxymethoxy)-5-(1,1,3,3-tetramethylbutyl)phenyl]-1methylbutyl]-6-cyano-5-[(4-morpholinylcarbonyl)oxy]-, 7-[2,6-bis(1,1-dimethylethyl)-4-methylcyclohexyl] ester (9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{Me} \\ \text{Me}_{3}\text{C-CH}_{2}\text{-C-Me} \\ \\ \text{O-CH}_{2}\text{-CO}_{2}\text{H} \\ \end{array}$$

IT 165178-15-4P 172872-83-2P 172872-84-3P (in pyrrolotriazole photog. cyan coupler prepn.)

RN 165178-15-4 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, 6-cyano-2-(2-methoxy-5-nitrophenyl)-, 2,6-bis(1,1-dimethylethyl)-4methylcyclohexyl ester (9CI) (CA INDEX NAME)

RN 172872-83-2 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, 5-chloro-6-cyano-2-(2-methoxy-5-nitrophenyl)-, 2,6-bis(1,1-dimethylethyl)-4-methylcyclohexyl ester (9CI) (CA INDEX NAME)

RN 172872-84-3 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, 2-(5-amino-2-methoxyphenyl)-5-chloro-6-cyano-, 2,6-bis(1,1-dimethylethyl)-4-methylcyclohexyl ester (9CI) (CA INDEX NAME)

IT 180639-13-8

(in pyrrolotriazole photog. cyan coupler prepn.)

RN 180639-13-8 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, 6-cyano-2-(2-methoxy-5-nitrophenyl)-, ethyl ester (9CI) (CA INDEX NAME)

IC ICM G03C007-38

ICS G03C007-00

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

ST pyrrolo triazole cyan photog coupler

IT Photographic couplers

(cyan, Ag halide color photog.

material contg. pyrrolotriazole cyan coupler)

IT 180639-09-2 180639-10-5 180639-11-6

180639-12-7 180803-49-0

(Ag halide color photog. material

contg. pyrrolotriazole cyan coupler)

IT 180639-07-0P 180639-08-1P

(Ag halide color photog. material

contg. pyrrolotriazole cyan coupler)

IT 165178-15-4P 172872-83-2P 172872-84-3P

180639-17-2P 180639-19-4P 180639-20-7P 180639-21-8P

180639-22-9P

(in pyrrolotriazole photog. cyan coupler prepn.)
IT 83-01-2 163119-16-2 180639-13-8 180639-15-0
180639-16-1 180639-18-3
(in pyrrolotriazole photog. cyan coupler prepn.)

L67 ANSWER 140 OF 152 HCA COPYRIGHT 2005 ACS on STN

124:131410 Silver halide color photographic

material containing pyrroloazole cyan coupler. Ito, Takayuki;

Suzuki, Makoto; Yoneyama, Hiroyuki (Fuji Photo Film Co Ltd, Japan).

Jpn. Kokai Tokkyo Koho JP 07248594 A2 19950926 Heisei, 45

pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1994-65442
19940310.

GΙ

The photog. material contains a pyrroloazole cyan coupler I in .gtoreq.1 layer on a support [Za = NH, CHR3; Zb, Zc = CR4:, N:; R1-3 = electron-withdrawing group with Hammett's substituent const. (.sigma.p) .gtoreq.0.2; sum of .sigma.p for R1 and R2 .gtoreq.0.65; R4 = H, substituent; X = H, leaving group by coupling reaction with oxide of arom. primary amine color developer; R1-4 and/or X is L1aSO2NHR5 or Q; L1, L2 = divalent linkage group; a, b = 0, 1; R5 = H, acyl, sulfonyl; m = 1, 2; R6 = halo, alkyl, aryl, OH, alkoxy, aryloxy, acylamino, sulfonamino, carbamoyl, sulfamoyl, ureido, alkoxycarbonyl, alkoxycarbonylamino, sulfonyl, alkylthio, CN, NO2, CO2H; n = 0-4]. The material gives high-d. images with good lightfastness.

IT 172872-83-2P

(prepn. and chlorination of; silver halide photog. material contg. pyrroloazole cyan coupler with improved lightfastness)

RN 172872-83-2 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, 5-chloro-6-cyano-2-(2-methoxy-5-nitrophenyl)-, 2,6-bis(1,1-dimethylethyl)-4-methylcyclohexyl ester (9CI) (CA INDEX NAME)

IT 172872-85-4P

(prepn. and debenzylation of; silver halide photog. material contg. pyrroloazole cyan coupler with improved lightfastness)

RN 172872-85-4 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid,
5-chloro-6-cyano-2-[2-methoxy-5-[[1-oxo-2-[4-[[4(phenylmethoxy)phenyl]sulfonyl]phenoxy]dodecyl]amino]phenyl]-,
2,6-bis(1,1-dimethylethyl)-4-methylcyclohexyl ester (9CI) (CA INDEX NAME)

PAGE 1-B

IT 172872~84-3P

(prepn. and reaction with acid chlorides; silver

halide photog. material contg. pyrroloazole
cyan coupler with improved lightfastness)

RN 172872-84-3 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, 2-(5-amino-2-methoxyphenyl)-5-chloro-6-cyano-, 2,6-bis(1,1-dimethylethyl)-4-methylcyclohexyl ester (9CI) (CA INDEX NAME)

IT 172872-83-2P

(prepn. and redn. of; silver halide photog. material contg. pyrroloazole cyan coupler with improved lightfastness)

RN 172872-83-2 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, 5-chloro-6-cyano-2-(2-methoxy-5-nitrophenyl)-, 2,6-bis(1,1-dimethylethyl)-4-methylcyclohexyl ester (9CI) (CA INDEX NAME)

OMe C1
$$CN t-Bu$$
 Me $CON t-Bu$ $CON t-Bu$

IT 172872-82-1

(reaction with butylmethylcyclohexanol; silver halide photog. material contg. pyrroloazole cyan coupler with improved lightfastness)

RN 172872-82-1 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, 5-chloro-6-cyano-2-(2-methoxy-5-nitrophenyl)-, ethyl ester (9CI) (CA INDEX NAME)

IT 172872-79-6 172872-80-9 172872-81-0 (silver halide photog. material

contg. pyrroloazole cyan coupler with improved lightfastness)

RN 172872-79-6 HCA

CN 1,3-Benzenedicarboxamide, 5-(aminosulfonyl)-N-[3-[[2-(6-cyano-7-[1,1':3',1''-tercyclohexan]-2'-yl-1H-pyrrolo[1,2-b][1,2,4]triazol-2-yl)phenoxy]methyl]phenyl]-N'-phenyl- (9CI) (CA INDEX NAME)

RN 172872-80-9 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, 5-chloro-6-cyano-2-[2-[[[2-[4-[(4-hydroxyphenyl)sulfonyl]phenyl]-1-oxododecyl]amino]methoxy]phenyl]-, 4-methyl-2,6-bis(1-methylethyl)cyclohexyl ester (9CI) (CA INDEX NAME)

RN 172872-81-0 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, 2-[5-[3-(aminosulfonyl)-5-[(phenylamino)carbonyl]benzoyl]amino]-2-[(2-ethylhexyl)oxy]phenyl]-5-chloro-6-cyano-, 2-(1,1dimethylethyl)cyclohexyl ester (9CI) (CA INDEX NAME)

IT 172872-77-4P 172872-78-5P

(silver halide photog. material

contg. pyrroloazole cyan coupler with improved lightfastness)

RN 172872-77-4 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, 2-[5-[[[3-(aminosulfonyl)phenyl]sulfonyl]amino]-2-methoxyphenyl]-5chloro-6-cyano-, 2,6-bis(1,1-dimethylethyl)-4-methylcyclohexyl ester (9CI) (CA INDEX NAME)

RN 172872-78-5 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, 5-chloro-6-cyano-2-[5-[[2-[4-[(4-hydroxyphenyl)sulfonyl]phenoxy]-1-oxododecyl]amino]-2-methoxyphenyl]-, 2,6-bis(1,1-dimethylethyl)-4-methylcyclohexyl ester (9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 1-B

IC ICM G03C007-38

ICS G03C007-00

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

ST photog pyrroloazole cyan coupler light fastness

ITPhotographic couplers (cyan, silver halide photog. material contg. pyrroloazole cyan coupler with improved light fastness) IT 172872-83-2P (prepn. and chlorination of; silver halide photog. material contg. pyrroloazole cyan coupler with improved lightfastness) IT 172872-85-4P

(prepn. and debenzylation of; silver halide photog. material contg. pyrroloazole cyan coupler with improved lightfastness)

172872-84-3P IT

> (prepn. and reaction with acid chlorides; silver halide photog. material contg. pyrroloazole cyan coupler with improved lightfastness)

IT 172872-83-2P

(prepn. and redn. of; silver halide photog. material contg. pyrroloazole cyan coupler with improved lightfastness)

IT 172872-82-1

> (reaction with butylmethylcyclohexanol; silver halide photog. material contg. pyrroloazole cyan coupler with improved lightfastness)

IT 585-47-7, 1,3-Benzenedisulfonyl dichloride 87016-97-5 163119-16-2

> (reaction with pyrrolotriazole deriv. coupler; silver halide photog. material contg. pyrroloazole cyan coupler with improved lightfastness)

172872-79-6 172872-80-9 172872-81-0 IT

(silver halide photog. material

contg. pyrroloazole cyan coupler with improved lightfastness)

IT 172872-77-4P 172872-78-5P

(silver halide photog. material

contg. pyrroloazole cyan coupler with improved lightfastness)

- ANSWER 150 OF 152 HCA COPYRIGHT 2005 ACS on STN L67
- 121:191113 Silver halide color photographic material photographic processing. Shono, Akiko (Fuji Photo Film Co Ltd, Japan). Jpn. Kokai Tokkyo Koho JP 05333494 A2 **19931217** Heisei, 48 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1992-158986 19920527.
- AB The title full color **photog**. material has .gtoreq.1 cyan coupler-contg. layer(s) contg. .gtoreq.1 pyrrolo azole cyan coupler and av. AgCl .gtoreq.90 mol%, and contains .gtoreq.1 solid The photog. processing includes exposing the above photog. material, and then finishing developing, water rinsing and stabilizing in 4 mins. The photog, material

shows superior color reproducibility, sharpness, background whiteness and rapid processability.

IT 152828-31-4 154021-52-0 157941-67-8 157941-68-9

(cyan coupler, photog. material using)

RN 152828-31-4 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, 2-[3-[[2-butoxy-5-(1,1,3,3-tetramethylbutyl)phenyl]sulfonyl]amino]p henyl]-6-cyano-, 2-hexyldecyl ester (9CI) (CA INDEX NAME)

RN 154021-52-0 HCA
CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid,
6-cyano-2-phenyl-, 2,4-bis(1,1-dimethylpropyl)phenyl ester (9CI)
(CA INDEX NAME)

RN 157941-67-8 HCA

CN Benzenesulfonamide, 2-butoxy-N-[3-[6-cyano-7-(4,4,5,5,6,6,7,7,8,8,9,9,9-tridecafluoro-1-oxononyl)-1H-pyrrolo[1,2-b][1,2,4]triazol-2-yl]phenyl]-5-(1,1,3,3-tetramethylbutyl)-(9CI)(CA INDEX NAME)

$$F_{3}C-(CF_{2})_{5}-CH_{2}-CH_{2}-C$$

$$NC$$

$$NH-S$$

$$Me-C-CH_{2}-CMe_{3}$$

$$Me$$

RN 157941-68-9 HCA

CN Octanamide, 2-[2,4-bis(1,1-dimethylpropyl)phenoxy]-N-[5-[(2-butoxy-5-octylphenyl)sulfinyl]-6-cyano-7-(3,3,4,4,5,5,6,6-octafluoro-1-oxohexyl)-1H-pyrrolo[1,2-b][1,2,4]triazol-2-yl] (9CI) (CA INDEX NAME)

IT 146822-29-9P

(prepn. and reaction of, cyan coupler from, for photog. material)

RN 146822-29-9 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, 6-cyano-2-(3,5-dichlorophenyl)-, ethyl ester (9CI) (CA INDEX NAME)

IT 157941-69-0P

(prepn. of, cyan coupler, for color photog. material)

RN 157941-69-0 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-6-carbonitrile, 2-(3,5-dichlorophenyl)-7-(3-hexyl-1-oxoundecyl)- (9CI) (CA INDEX NAME)

IC ICM G03C007-38

ICS G03C001-035; G03C001-825; G03C007-407

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 41

ST photog material pyrroloazole cyan coupler dye

IT Photographic paper

(contg. pyrrolo azole cyan coupler and specific dye)

IT Photographic couplers

(cyan, pyrrolo azole)

IT 152828-31-4 154021-52-0 157941-67-8

157941-68-9

(cyan coupler, photog. material using)

IT 135872-57-0 135892-86-3 136266-66-5 137641-44-2 138826-54-7 (dye, photog. material using)

IT 146822-29-9P 151019-75-9P 151019-76-0P

(prepn. and reaction of, cyan coupler from, for photog.

material)

IT 157941-69-0P

(prepn. of, cyan coupler, for color photog. material)

IT 2425-77-6

(reaction of, cyan coupler from, for photog. material)

IT 2905-62-6 154021-47-3

(reaction of, cyan coupler from, for **photog**. material **photog**. material)

L67 ANSWER 152 OF 152 HCA COPYRIGHT 2005 ACS on STN

121:121593 Silver halide photographic

III

materials with excellent color reproducibility and process stability. Yamamoto, Mitsuru; Suzuki, Makoto; Shimada, Yasuhiro (Fuji Photo Film Co Ltd, Japan). Jpn. Kokai Tokkyo Koho JP 05281679 A2 19931029 Heisei, 97 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1992-108434 19920402.

GI

$$\begin{array}{c|c}
R^{11} & R^{12} \\
x^{1} & Z_{a} \\
\vdots & \vdots \\
z_{c} = z_{b} & I
\end{array}$$

IV

AB In the title **photog.** materials comprising .gtoreq.1 blue-, green-, and red-sensitive **Ag halide** emulsion layers on a support, .gtoreq.1 **photog.** constituting layer contains .gtoreq.1 cyan coupler represented by I or II [Za = NH, CH(R13); Zb, Zc = C(R14):, N:; R11-13 = electron acceptors with Hammett's substitution const. .sigma.p.gtoreq.0.2; sum of .sigma.p of R11 and R12 is .gtoreq.0.65; R14,21 = H, substituent; Z2 =

nonmetallic at. group forming N-contg. 6-membered heterocyclyl contg. .gtoreq.1 dissocg. moiety; X1,2 = H, moieties released upon coupling reaction with oxidized arom. primary amine color developing agent], and .gtoreq.1 compd. represented by III [R11 = R14N(R16)CON(R15), R14OCON(R15), R14SO2(R15), R14N(R16)SO2N(R15), R17CONH; R14 = alkyl, alkenyl, alkynyl, aryl, heterocyclyl; T15,16 = H, alkyl, aryl; R17 = C.gtoreq.2 alkyl without heteroatoms adjacent to carbonyl group, alkenyl, alkynyl, aryl, heterocyclyl; R12,13 = H, substituent with Hammett's substitution const. .sigma.p.ltoreq.0.3; X = development inhibitor; k = integer; A, A' = moieties removable by H or alkali] or IV [Q1 = at. group forming .gtoreq.5-membered heterocyclyl which combines C and contains .gtoreq.1 hetero-atom; R21 = substituent on hydroquinone nucleus].

IT 146822-29-9P

(prepn. and reaction of, silver halide color photog. material from)

RN 146822-29-9 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, 6-cyano-2-(3,5-dichlorophenyl)-, ethyl ester (9CI) (CA INDEX NAME)

IT 151019-65-7P

(prepn. and use of, silver halide color photog. material from)

RN 151019-65-7 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, 6-cyano-2-(3,5-dichlorophenyl)-, 2-hexyldecyl ester (9CI) (CA INDEX NAME)

IT 154021-52-0 154021-60-0 155926-12-8 (silver halide color photog. material contg.)

RN 154021-52-0 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, 6-cyano-2-phenyl-, 2,4-bis(1,1-dimethylpropyl)phenyl ester (9CI) (CA INDEX NAME)

RN 154021-60-0 HCA

CN 1H-Pyrrolo[2,1-c]-1,2,4-triazole-7-carboxylic acid, 3-[4-[[2-butoxy-5-(1,1,3,3-tetramethylbutyl)phenyl]sulfonyl]amino]p henyl]-6-cyano-, 2-hexyldecyl ester (9CI) (CA INDEX NAME)

RN 155926-12-8 HCA

1H-Pyrrolo[1,2-a]imidazole-2,7-dicarboxylic acid, 6-cyano-3-phenyl-, CN 2-ethyl 7-(2-hexyldecyl) ester (9CI) (CA INDEX NAME)

ICM G03C007-38 IC

G03C007-305 ICS

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

STsilver halide color photog material; cyan coupler color photog material

Photographic couplers IT

(cyan, with excellent color reproducibility and process stability)

IT 150172-54-6P 151019-75-9P 151019-76-0P 146822-29-9P (prepn. and reaction of, silver halide color photog. material from)

IT 151019-65-7P 156563-88-1P

(prepn. and use of, silver halide color

photog. material from)